

678	27364	92836	89428	61288	74982	36498	32764	81276	81
986	48932	78987	32123	49817	26346	81287	65491	87364	81
721	75654	55656	12737	72727	72727	91918	63473	67867	76
723	87629	37677	32612	53498	71296	28756	18276	98716	87
7269	76329	74698	76857	98678	27681	56781	57681	73648	1
591	87364	87265	96718	27638	12673	84769	28743	98127	5
58	63298	75698	27465	87326	49876	28376	81273	98615	62
667	87432	74328	78674	29867	32867	67867	86786	43286	492
657	68768	68763	34234	34238	68768	62342	48273	48768	234
936	98432	32432	86743	43286	43286	43286	43286	43286	432
743	86743	86743	39867	32867	86743	43286	43286	43243	867
741	86743	86743	86743	86743	86743	86743	86743	86743	435
543	98798	98754	98754	98754	98754	29867	67543	67986	867
76	87698	69876	87698	69876	87612	12341	34867	86798	632
867	43298	65656	56756	56123	32143	14321	32143	14321	321
81	12787	58765	76587	58765	76587	58765	76587	58756	765
75455	86543	54365	36543	54365	36543	54365	36543	54365	54

# *Numbers & Oddities* *a.k.a. The Spooks Newsletter*

*Edition #171, December 2011*

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Check for previous newsletters, info, sound samples and databases also:

**NUMBERS & ODDITIES** <http://www.numbersoddities.nl>

<http://www.ary.luna.nl>

**SPY NUMBERS ONLINE DATABASE** <http://www.spynumbers.com/numbersDB>

**UTILITY DXERS FORUM (UDXF)** <http://www.udxf.nl>



*I wish all contributors and readers of "Numbers & Oddities" a healthy and prosperous new year and many hours of hobby pleasure.*

*I'd like to thank everyone who has provided logs, pictures, recordings, information and translations in the past year and hope that you will support N&O also in 2012.*

#### ***New designator***

Although not 100% certain, the often reported air defense station is most probably transmitting from China. N&O has designated MC03 to this station. The database has been updated accordingly.

The Oman Tribune published an article about the death of Kim Jong Il. Interesting is the part about the radio transmissions: <http://www.omantribune.com/index.php?page=news&id=108371&heading=Asia>

*SEOUL North Korea has changed its secret communication frequencies or encryption system to prevent spying by South Korea following the death of its leader Kim Jong-il, a report said on Saturday.*

*Seoul is struggling to gather intelligence following the changes, which came after the first order given by Kim's son and successor Jong-un was apparently leaked to the South Korean media, according to the Dong-A Ilbo.*

*"It appears that the North Korean military is changing the frequency bandwidth or encryption system out of the fear that the South Korean military is wiretapping," the South Korean daily quoted a military intelligence source as saying.*

Other related articles:

<http://www.theaustralian.com.au/news/world/south-korea-spy-chief-says-north-lied-about-train-death-of-kim-jong-il/story-e6frg6so-1226228448148>

<http://intelnews.org/2011/12/19/01-889/>

<http://www.kcna.co.jp/item/2011/201112/news25/20111225-03ee.html>

and of course an enormous amount of items on the KNCA and Voice of Korea websites:

<http://www.kcna.kp/goHome.do?lang=eng>

<http://www.vok.rep.kp/CBC/english.php>

This month we have again lots of E25 logs provided by Manolis, S6930 logs by ScanSweden, S30 logs and info by Tucana, extended V24, M94 and V07 reports by Token and a huge amount of M89 logs submitted by JPL. Thanks a million for sending them!!! Also thanks to Danix, Trojan, Jan and all other active contributors. Without you there would be no N&O.

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## VOICE STATIONS

### E06



3842 kHz, 14-12, 1951 UTC: Test count "123456789"

4036 kHz, 14-12, 1920 UTC: 829 829 829 00000

3842 kHz, 14-12, 2020 UTC: 829 829 829 00000

---

5796/4516 kHz, 0130/0230 UTC, 17-12 + 18-12:

759 126 34  
83255 95204 57415 91827 61000  
18908 26105 62620 34000 90691  
77057 68082 67452 51854 68302  
31059 14044 33096 64645 07096  
84089 23947 78553 57620 55213  
39946 99810 66979 01276 86017  
06133 64260 45224 39469  
126 34 00000

---

5796/4516 kHz, 0130/0230 UTC, 24-12 + 25-12:

759 308 42  
33816 22068 62918 04804 25771  
30125 83586 04879 83922 80359  
85178 30078 21800 57587 52592  
83970 27640 29912 35990 40593  
62715 34144 46646 67416 94925  
37489 34133 55054 66072 67689  
05799 58389 16274 28821 74467  
78821 13934 44906 45297 42314  
64720 98563  
308 42 00000

---

4836 kHz, 2030 UTC, 01-12 + 15-12:

321 486 15  
63527 38465 89056 74352 12389  
05463 27894 36251 36490 64578  
53257 43689 54327 54678 53421  
486 15 00000

The zeroes at the end were read slowly instead of rapidly as per normal. After message was completed, Windows XP could be heard very faintly with the tone played when a USB of Flash device is removed from a computer.

5796/4516 kHz, 0130/0230 UTC, 03-12 + 04-12:

759 401 32  
97226 15794 93939 92005 47967  
25570 75816 29572 92615 12497  
26829 56255 32867 91568 29532  
97792 37217 79364 12306 98506  
14373 29836 72033 53434 67610  
74877 20701 60072 47290 55617  
85608 38202  
401 32 00000

---

5796/4516 kHz, 0130/0230 UTC, 10-12 + 11-12:

759 862 31  
11159 58735 37498 16320 63408  
28541 51481 21849 23328 60503  
28120 64064 04038 84761 15734  
47726 20129 03239 43843 94921  
29471 17473 56048 78212 42708  
94817 34802 13260 30112 21469  
60267  
862 31 00000

---

5796/4516 kHz, 0130/0230 UTC, 31-12 + 01-01:

759 180 32  
97712 87565 08547 58234 10478  
32030 69269 05617 58420 78912  
55028 91445 14644 34747 32438  
04663 77977 93698 62944 57821  
27439 98162 33201 94079 01520  
82111 61277 56070 75589 25898  
41792 90455  
180 32 00000

## **E07**



E07, 7478 kHz, 05-12, 2000 UTC: 472 472 472 000

E07, 6982/5836 kHz, 18-12, 1800/1820 UTC:  
989 989 989 000

E07, 7478/6778 kHz, 18-12, 2000/2020 UTC:  
472 472 472 000

E07a, 5146/5864/6846 kHz, 08-12, 0530/0550/0610 UTC

188 188 188 1 621 28  
12469 12469 64125 70735 04391 65921 90107 35180  
85225 19695 23078 64391 14205 19608 23662 60316  
03365 40435 88857 38868 11787 45539 85959 34556  
00876 68541 72698 24959 73108 94416 15049 22577  
02214 48940 20683 06035 71827 34559 39715 90384  
33099 15243 79068 13963 57789 76291 73229 25495  
46863 72936 63819 79582 84172 38245 27101 12270  
85507 35701 07507 74404 97795 97922 06247 89528  
63362 48286 43085 43465 92819 10811 53799  
000 000

E07, 6777/5449/5440 kHz, 22-12, 2110/2120/2130 UTC  
E07, 4483 kHz, 22-12, 2150 UTC

774 774 774 1 238 48  
21334 82740 85131 23351 86253 19274 53180 2955  
18517 11688 79464 82929 93435 56956 34010 67522  
56011 37806 45750 92542 36179 98389 82909 68030  
19996 24223 25467 94327 38667 84161 18180 16863  
13601 04790 65682 25932 60773 22393 33438 39697  
20677 10871 67607 22374 43621 66737  
000 000

E07, 6777/5449/4483 kHz, 08-12, 2110/2130/2150 UTC

774 744 744 1 582 47 582 47  
59126 43616 40527 35893 68306 42931 66599 32719  
92882 10398 93811 03436 98716 75835 50378 05846  
00311 90726 37195 10529 64216 56462 60436 07283  
99174 38641 90696 91902 67106 27008 76806 95617  
16164 76793 71152 20515 01620 95241 41202 04870  
27672 39162 21077 69102 15112 47799 23752  
000 000

E07, 7478/6778/5278 kHz, 12-12, 2000/2020/2040 UTC

472 472 472 577 20  
20492 11032 28363 21737 03292 14397 28542 89485  
18847 76169 09400 94148 49452 10096 81506 89971  
20015 17290 60874 08282  
000 000

E07a, 5864/5164/4564 kHz, 07-12, 2100/2120/2140 UTC

815 1 62128 124 69  
64125 70735 04391 65921 90107 35180 85225 19695  
23078 64391 14205 19608 23662 60316 03365 40435  
88857 38868 11787 45539 85959 34556 00876 68541  
72698 24959 73108 94416 15049 22577 02214 48940  
20683 06035 71827 34559 39715 90384 33099 15243  
79068 13963 57789 76291 73229 25495 46863 72936  
63819 79582 84172 38245 27101 12270 85507 35701  
07507 74404 97795 97922 06247 89528 63362 48286  
43085 43465 92819 10811 53799  
000 000

## **E11/E11a**



5082 kHz, 1730 UTC, 01-12: 416/00  
6433 kHz, 1320 UTC, 03-12: 299/00  
9446 kHz, 0830 UTC, 26-12: 649/00  
9446 kHz, 0900 UTC, 26-12: 534/00  
7840 kHz, 0645 UTC, 27-12: 517/00  
7317 kHz, 0820 UTC, 29-12: 438/00  
9446 kHz, 0830 UTC, 29-12: 649/00  
4441 kHz, 0900 UTC, 29-12: 248/00  
4441 kHz, 0900 UTC, 31-12: 248/00

E11a, 10690 kHz, 1400 UTC, 24-12:

981/10 Attention!  
04594 43980 67196 88966 23923  
25698 82280 92178 88784 64692  
Out

Note:  
All groups ended in an even number apart from 23923

4909 kHz, 2000 UTC, 20-12: 757/00000/00 out

---

E11a, 9446 kHz, 0900 UTC, 07-12

537/36 Attention

31130 50137 94209 26635 96265  
44165 64317 84316 56116 36122  
92067 75545 88231 20501 99706  
85145 23321 20055 60611 79525  
69703 89990 31626 05077 02489  
63840 14758 86084 27065 66089  
22067 95432 11364 79950 18768  
89306  
Out

E11a, 7317 kHz, 0820 UTC, 08-12

438/36 Attention

72782 61000 44391 75335 30605  
47511 47432 17185 36623 96857  
11958 11768 30348 02525 98993  
13265 98674 56856 74427 88685  
68601 53385 47766 60932 80060  
05410 95265 45563 33874 64409  
47868 82311 40292 94091 73725  
33267  
Out

---

## E17z



11170 kHz, 29-12, 0800 UTC: 674 674 674 00000

---

## E25



E25 has been very active again. Thanks to Manolis and Douglas for the logs.

E25, 6140 kHz, 0801 UTC, 03-12: 360 6580 6010 1514 3896 1189 9242 6010 1007 YL, EOM  
E25, 6140 kHz, 0930 UTC, 03-12: 333 4001 7030 4348 4835 7097 3619 4390 4613 1035 7030 tone, YL, EOM  
E25, 6140 kHz, 1032 UTC, 03-12: 672 1527 2032 4752 1569 2499 9206 3255 5776 YL, EOM  
E25, 6140 kHz, 1046 UTC, 03-12: 128 4568 5990 2360 9568 3380 1809 0430 7141 2360 YL, EOM  
E25, 6140 kHz, 0930 UTC, 05-12: 133 9018 7018 1400 0765 0732 9133 5497 tone 0928z, buzzes, YL, Mx1, 9018 then call, pauses, AM  
E25, 6140 kHz, 0801 UTC, 06-12: 360 7590 1510 6060 3137 7735 4027 3558 1510 1007 tone, OM live, Mx3, pause, Mx3, tone  
E25, 6140 kHz, 0816 UTC, 06-12: 185 6493 4120 1089 9853 8075 4954 9141 8489 187 6 tone, OM live, tone  
E25, 6140 kHz, 0929 UTC, 06-12: 133 (as of 05/12) 135 64 tone 0927z, YL  
E25, 6140 kHz, 1044 UTC, 06-12: 128 1066 6990 6130 7768 6597 3854 7772 5558 6130 tone, YL  
E25, 6140 kHz, 0800 UTC, 07-12: 360 5 first grps of 06/12 tone 0756z, YL, ring sounds (Windows?)  
E25a, 6140 kHz, 0816 UTC, 07-12: 187 7 carrier 0807z, tone, YL, Mx3 etc  
E25a, 6140 kHz, 0931 UTC, 07-12: 135 65 66 tone, YL, Mx3, Rx3, EOT MG WED  
E25, 6140 kHz, 1045 UTC, 07-12: 128 (as of 06/12) tone, YL, irregular, audio problems, pause, Rx3  
E25a, 6140 kHz, 0802 UTC, 08-12: 364 9 tone, YL, irregular, "Message"  
E25a, 6140 kHz, 0815 UTC, 08-12: 126 48 YL, nearly incomprehensible  
E25a, 6140 kHz, 0800 UTC, 12-12: 117 7 tone, YL, 0802z voice slows down, carrier QRT 0830z, AM  
E25, 6140 kHz, 0831 UTC, 12-12: 701 5611 1430 0201 3579 7977 9425 1253 7669 3650 1430 140 tone, YL, slows down, 0833z brief tone, YL speeds up 701 slows down, 0838z EOM, brief tone, 140 rptd, music  
E25, 6140 kHz, 0845 UTC, 12-12: 169 2140 1540 1056 1721 1721 7560 3997 6991 2217 3402 0474 1634 tone, YL, slows down, carrier QRT 0856z, AM  
E25, 6140 kHz 1000 UTC, 12-12: 570 4630 1038 9584 6441 0592 2270 2724 5306 carrier, tone, YL fast, AM

E25, 6140 kHz, 1046 UTC, 12-12: 880 1810 7111 1099 6196 8979 1069 0704 0618 8111 7852 1810 tone, YL, EOM

E25, 9450 kHz, 1245 UTC, 12-12: 555 2121 2021 0110 6422 7056 5601 3046 6436 7646 1768 2820 0110 carrier 1230z, WinXP startup sound at 1235z, tone, ALM, YL, EOM only

E25a, 6140 kHz, 0830 UTC, 13-12: 702 22 tone, YL, AM, carrier

E25a, 6140 kHz, 0845 UTC, 13-12: 162 81 tone, YL, AM, carrier

E25, 6140 kHz, 0930 UTC, 13-12: 135 67 333 6080 1620 9824 8561 1036 0676 1035 1620]0935z tone, YL, 13 rptd, Mx3, AM

E25a, 6140 kHz, 0959 UTC, 13-12: 575 66 tone, YL, Mx3, Rx3, EOM

E25a, 6140 kHz, 1115 UTC, 13-12: 887 9 tone, YL, Mx3, Rx3, EOM

E25a, 9450 kHz, 1229 UTC, 13-12: 557 2 carrier i.p. 1200z, tone, ALM, YL, Mx2

E25a, 9450 kHz, 1317 UTC, 13-12: 785 1 carrier 1310z, tone, YL, Mx3, carrier

E25a, 9450 kHz, 1346 UTC, 13-12: 227 1 tone, ALM, YL, Mx3, Rx3, EOM, carrier

E25, 6140 kHz, 0758 UTC, 14-12: 116 1280 1035 3160 4772 8494 8059 6776 0965 tone, YL, AM, carrier

E25, 6140 kHz, 0830 UTC, 14-12: YL, "9...9...9", music, stops 0836z, carrier QRT 0838z

E25, 6140 kHz, 0946 UTC, 14-12: 350 4121 0401 1051 3598 5004 9363 2982 1692 7232 8011 5021 7285 1633 7367 0401 tone, IO, YL "33", EOM

E25 6140 kHz, 0800 UTC, 15-12: 116 (as of 14/12) WinXP sounds, tone, YL, EOM, AM

E25, 6140 kHz, 0837 UTC, 15-12: Song: Abdel Halim Hafez - Ahwak (I love you) AM

E25, 9450 kHz, 1305 UTC, 15-12: WinXP sounds, OM prayer, WinXP Spider Solitaire sounds, carrier

E25, 9450 kHz, 1317 UTC, 15-12: tone, YL, numbers 0-9, ALM, 1323z tone, numbers 0-6, WinXP sounds, carrier

E25a, 9450 kHz, 1327 UTC, 15-12: 785 2 tone, YL, Mx3, Rx3, carrier, WinXP Spider Solitaire sounds

E25a, 6140 kHz, 1045 UTC, 17-12: 126 49 tone, YL

E25, 6140 kHz, 1100 UTC, 17-12: carrier i.p

E25, 6140 kHz, 0800 UTC, 18-12: 116 2280 9433 5520 7478 1201 5608 9405 3128]0804z tone, YL, EOM

E25, 6140 kHz, 0917 UTC, 18-12: 950 2001 8121 5210 3919 9177 9251 2180 5872 2533 5210 YL, EOM

E25, 9450 kHz, 1301 UTC, 18-12: 275 1051 280x14 carrier up 1248z, tone, YL, EOM

E25a, 6140 kHz, 0930 UTC, 20-12: 135 68 carrier 0924z, tone, YL, Mx3, AM

E25, 6140 kHz, 1044 UTC, 20-12: 128 6765 7921 3930 8785 7711 8194 4474 4021 0385 2075 8861 3930 carrier 1040z, tone, YL, EOM

E25a, 9450 kHz, 1315 UTC, 20-12: 785 5 788 4 tone, YL, 1317z 7 rptd, Mx3, R, 4, tone, starts again, EOM EOT

E25, 6140 kHz, 1048 UTC, 21-12: 128 (as of 20/12) YL, EOM MG WED

E25, 6140 kHz, 1046 UTC, 22-12: 128 9861 8961 5750 4848 0653 0324 1720 7892 2525 3905 7226 7331 7254 2058 8852 5750 127 tone, YL, EOM only

E25, 6140 kHz, 1045 UTC, 23-12: 127 128 (as of 22/12) tone, YL

E25, 6140 kHz, 0929 UTC, 24-12: YL 333 333 333... 7001 0120 5159 6912 8665 0803 7044 4386 4328 0120 REBEAT REBEAT 7001 0120 5159 6912 8665 0803 7044 4386 4328 0120 EOM. Wingdings sound, Windows sounds

E25, 6140 UTC, 1030 UTC, 24-12: YL 675 88 675 88 675 88 675 88... EOM

E25, 6140 kHz, 0929 UTC, 24-12: 333 7001 0120 5159 6912 8665 0803 7044 4386 4328 0120 tone, YL, AM

E25a, 6140 kHz, 1030 UTC, 24-12: 675 88 tone, YL, EOM EOT

E25, 6140 kHz, 0900 UTC, 25-12: 111 5221 3310 2041 6393 0561 4291 0549 9842 7963 5568 1642 8605 3736 3310 tone, YL, AM

E25a, 6140 kHz, 0900 UTC, 26-12: 200 1 tone, YL, AM

E25, 6140 kHz, 0935 UTC, 27-12: 333 8011 4930 9607 6631 4636 3268 0436 1560 6401 5733 4930 YL, EOM

E25, 6140 kHz, 1045 UTC, 27-12: 128 2566 9990 2960 7768 2247 7177 3026 2974 2960 tone, EOM

E25, 6140 kHz, 1045 UTC, 28-12: 128 (as of 27/12) tone, YL, EOM, WinXP "clicks" carrier afterwards

E25, 6140 kHz, 0839 UTC, 29-12: "Spider Solitaire" sounds, digi QRM due to E25 carrier, QRT 1020z

E25a, 9450 kHz, 1215 UTC, 31-12: 830 1 carrier, tone, IO, YL, AM

E25, 9450 kHz, 1315 UTC, 31-12: 780 9793 1060 6110 5645 2817 6110 788 4 6 tone, YL, 7 rptd, EOM

E25, 9450 UTC, 1320 UTC, 31-12: (as of 1315z) YL

## G06



3854 kHz, 1700 UTC, 05-12. Copied by AIK.  
439 439 439 00000 43123456789 43123456789 ....

3838 kHz, 1905 UTC, 19-12: 349 349 349 00000  
4587 kHz, 1800 UTC, 05-12: 539 539 539 00000

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## G11



4441 kHz, 2000 UTC, 02-12

6480 kHz, 0940 UTC, 01-12: 275/00

262/31

6433 kHz, 1325 UTC, 24-12: 299/ 00

Achtung

6433 kHz, 0940 UTC, 26-12: 275/00

85109 10189 38532 77108 72611

6480 kHz, 0940 UTC, 29-12: 275/00

30702 06763 62456 01955 97550

94476 99726 26193 47344 57615

54260 78100 38577 34715 91084

19547 73115 88816 99857 15145

92747 48224 76434 54816 74564

24058

Achtung

Repeats message

Ende

---

## S06



S06s, 12155/10920 kHz, 01-12, 1200/1210 UTC

S06, 6788 kHz, 1605 UTC, 03-12: 134 134 134 00000

425 879 6

S06, 3838 kHz, 1805 UTC, 01-12: 349 349 349 00000

75643 89764 09091 24365 78564 66042

S06, 3838 kHz, 1805 UTC, 05-12: 349 349 349 00000

879 6 00000

S06, 3645 kHz, 1800 UTC, 06-12: 617 617 617 00000

S06, 3842 kHz, 1936 UTC, 17-12: 366 366 366 00000

S06, 3192 kHz, 1900 UTC, 12-12: 349 349 349 00000

S06, 6788 kHz, 1605 UTC, 24-12: 134 134 134 00000

S06s, 8260 kHz, 1210 UTC, 03-12

S06s, 12952 kHz, 0900 UTC, 29-12: 167 167 167 00000

S06s, 13565 kHz, 0910 UTC, 29-12: 167 167 167 00000

---

254 903 6

71143 55384 65416 85422 93040 73775

903 6 00000

---

S06s, 7436/6668 kHz, 12-12, 1600/1610 UTC

S06s, 11780 kHz, 0930 UTC, 02-12

176 234 5

516 270 8

89675 45312 78695 34331 09786

74072 45156 75178 56798 76152 64255 80532 13223

234 5 00000

270 8 00000



S06s, 12365/14280 kHz, 1000/1010, 28-12:

729 531 6

65653 89756 31208 97956 34331 86761

531 6 00000

S06s, 5250/6320 kHz, 13-12, 0700/0715 UTC:

374 265 8

46062 68672 97478 39685 30485 96632 52537 53317

265 8 00000

## S11a



12530 kHz, 01-12, 1015 UTC: 475/00

9610 kHz, 02-12, 1020 UTC: 426/00

12530 kHz, 29-12, 1015 UTC: 475/00

9610 kHz, 30-12, 1020 UTC: 426/00

## S28 family

(S28, S5426, S6930)

### *The Buzzer / UVB-76 / MDZhB*



02-12	0727	Short conversation. "Why is that loud? There is something not adjusted."
07-12	1422	MDZhB 42 651 METROKIN 32 52 15 40
07-12	1435	MDZhB 78 257 TsETRARIY 96 53 87 58
07-12	1437	MDZhB 69 239 VETOKhA 16 33 99 32
11-12	1252	MDZhB 65 940 Petelshchik 36 11 60 21
11-12	1256	MDZhB 30 363 Netverdij 20 88 37 70
13-12	0811	MDZhB 16 994 FYeSTUKA 36 72 98 43
14-12	0740	MDZhB 44 833 BYeSSChYeTNYJ 68 25 93 41
15-12	1347	The buzzer on 6930 kHz
17-12	0431	MDZhB 81 176 BYeSSOYuZNYJ 18 89 23 12
21-12	1830	The buzzer on 6930 kHz
28-12	1527	MDZhB 97 416 Metropotat 40 77 29 21
29-12	1302	MDZhB 71 567 Terrakota 29 53 56 23

## S6930

Below again a large list of S6930 logs from ScanSweden. Trojan wrote one of them down for me:

24-12, 1432 UTC: Каток-65 640 15 ЦЕПЬ 16 36 71 59 Приём!

Katok-65 640 15 CYeP' 16 36 71 59 Priyom!

S6930	01-12	1319 UTC	6930 kHz	test count
S6930	01-12	1325 UTC	6930 kHz	test count
S6930	01-12	1421 UTC	6930 kHz	message
S6930	02-12	0624 UTC	6930 kHz	test count
S6930	02-12	0722 UTC	6930 kHz	message
S6930	02-12	0905 UTC	6930 kHz	message
S6930	02-12	1235 UTC	6930 kHz	test count
S6930	02-12	1309 UTC	6930 kHz	message
S6930	02-12	1427 UTC	6930 kHz	test count
S6930	02-12	1431 UTC	6930 kHz	message

S6930	06-12	0634 UTC	6930 kHz	test count
S6930	12-12	0804 UTC	6930 kHz	test count
S6930	12-12	1414 UTC	6930 kHz	test count
S6930	13-12	0720 UTC	6930 kHz	test count
S6930	13-12	0811 UTC	6930 kHz	message
S6930	13-12	1319 UTC	6930 kHz	message
S6930	13-12	1407 UTC	6930 kHz	test count
S6930	13-12	1458 UTC	6930 kHz	message
S6930	15-12	1347 UTC	6930 kHz	the buzzer
S6930	16-12	0706 UTC	6930 kHz	test count



S6930	16-12	0717 UTC	6930 kHz	test count	S6930	21-12	1830 UTC	6930 kHz	the Buzzer
S6930	16-12	0734 UTC	6930 kHz	test count	S6930	22-12	0649 UTC	6930 kHz	message
S6930	16-12	0838 UTC	6930 kHz	message	S6930	22-12	0747 UTC	6930 kHz	message
S6930	16-12	0916 UTC	6930 kHz	message	S6930	22-12	0909 UTC	6930 kHz	message
S6930	16-12	1221 UTC	6930 kHz	message	S6930	22-12	1217 UTC	6930 kHz	message
S6930	16-12	1335 UTC	6930 kHz	message	S6930	22-12	1303 UTC	6930 kHz	message
S6930	18-12	0925 UTC	6930 kHz	message	S6930	22-12	1440 UTC	6930 kHz	message
S6930	18-12	1415 UTC	6930 kHz	message	S6930	23-12	0800 UTC	6930 kHz	message
S6930	18-12	1451 UTC	6930 kHz	message	S6930	23-12	0851 UTC	6930 kHz	message
S6930	19-12	0741 UTC	6930 kHz	message	S6930	23-12	0907 UTC	6930 kHz	test count
S6930	19-12	0917 UTC	6930 kHz	message	S6930	23-12	1218 UTC	6930 kHz	test count
S6930	19-12	1314 UTC	6930 kHz	message	S6930	23-12	1259 UTC	6930 kHz	message
S6930	20-12	0809 UTC	6930 kHz	message	S6930	23-12	1419 UTC	6930 kHz	test count
S6930	20-12	0925 UTC	6930 kHz	message	S6930	23-12	1423 UTC	6930 kHz	message
S6930	21-12	0801 UTC	6930 kHz	message	S6930	23-12	1546 UTC	6930 kHz	test count
S6930	21-12	0847 UTC	6930 kHz	message	S6930	24-12	1412 UTC	6930 kHz	test count
S6930	21-12	0921 UTC	6930 kHz	message	S6930	24-12	1423 UTC	6930 kHz	message
S6930	21-12	1216 UTC	6930 kHz	test count	S6930	25-12	1051 UTC	6930 kHz	test count
S6930	21-12	1220 UTC	6930 kHz	message	S6930	25-12	1114 UTC	6930 kHz	message
S6930	21-12	1325 UTC	6930 kHz	message	S6930	25-12	1136 UTC	6930 kHz	message
S6930	21-12	1414 UTC	6930 kHz	message	S6930	25-12	1406 UTC	6930 kHz	test count

## S30 – The Pip



Tucana has spent a lot of time listening to S30 during the past few months. He compiled all the info and sent us a report of his findings. A more extended version can be found on the Priyom website at <http://priyom.org/blog/pip-%28s30%29-december-2011.aspx> If you have additional info or questions, you can contact Tucana at [tucana@priyom.org](mailto:tucana@priyom.org)

It became clear that the Pip uses two transmitters and occasionally multicasts up to 50 minutes during the frequency switchover. Voice messages are sent on both frequencies during this time. Frequencies used are 5448 kHz (day time) and 3756 kHz (night time).

### Schedules

	Day time	Night time
	5448 kHz	3756 kHz
Transmission times	0430-1300 UTC	1300-0430 UTC
Dlya schedule	From	To
Morning	0232 UTC	0423 UTC
Evening	1709 UTC	1813 UTC

### Statistics

Messages	Day*	Night	Daily	Total
Dlya	24	69	3	93
8C1Щ	10	5	0,48	15
TOTAL	34	74	3,48	108

\* Day frequency has been monitored from December 9 onwards

### Message types

#### Для (Dlya)

The Pip has continued to send Dlya messages regularly. With more data now available it is clear that they have a pool of call signs that they shuffle every now and then but the calls themselves don't seem to change. I presented this pool of call signs in my previous post and the content is still valid, however Pip

operators have added a few tricks to change the order they are sent in.

From mid-November to mid-December the main order was to send every second pool: 01-03-05-07-09-11-13-15-02-04-06-08-10-12-14 and loop this system a couple times around. After this Pip started offsetting these pools, a practise that is detailed in the following chapter. And the most recent activity - December 28 onwards - indicates that Pip has returned to the normal call sign pool it ran from mid-November to mid-December.

In conclusion it seems that there is no strict regimen to how these call signs are shuffled and when the switchovers happen, however in general one can expect changes to the system every 2 weeks or so.

A mistake on the 12<sup>th</sup> of December suggests that the Pip operators have a premade list of messages to send. The operator read pool 7 message and he also read one extra call sign, BTX3, which belongs to the pool 9 which was the logical next message in the rotation Pip had at the time. It is possible that he read this last call sign by mistake as he kept a little pause after the first reading, presumably trying to find his place.

This was soon confirmed in the next sending at 1753z where pool 9 message was read, but with the first call sign omitted. Presumably they had received a reception report from the recipient BTX3 and it was not necessary to contact that station again in just 4 hours.

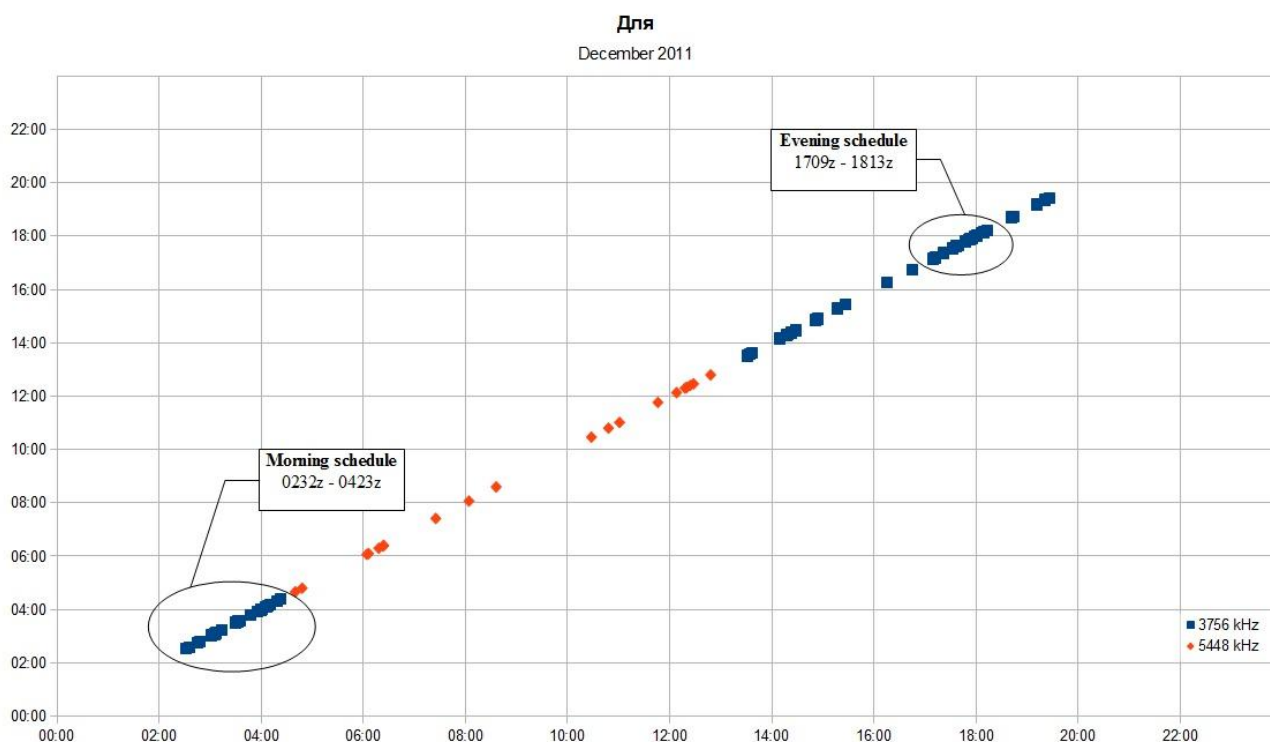
### Offsetting

Offsetting means that Pip skips the first call sign of the pool and reads the last 9 and then jumps to the pool after the next and reads the first call sign of that.

As half of the call signs in each pool are identical to the previous and following pool it makes sense to jump over the next pool to avoid repetition. So far the offsets have been 1 to 4 call signs and seem to be quite random.

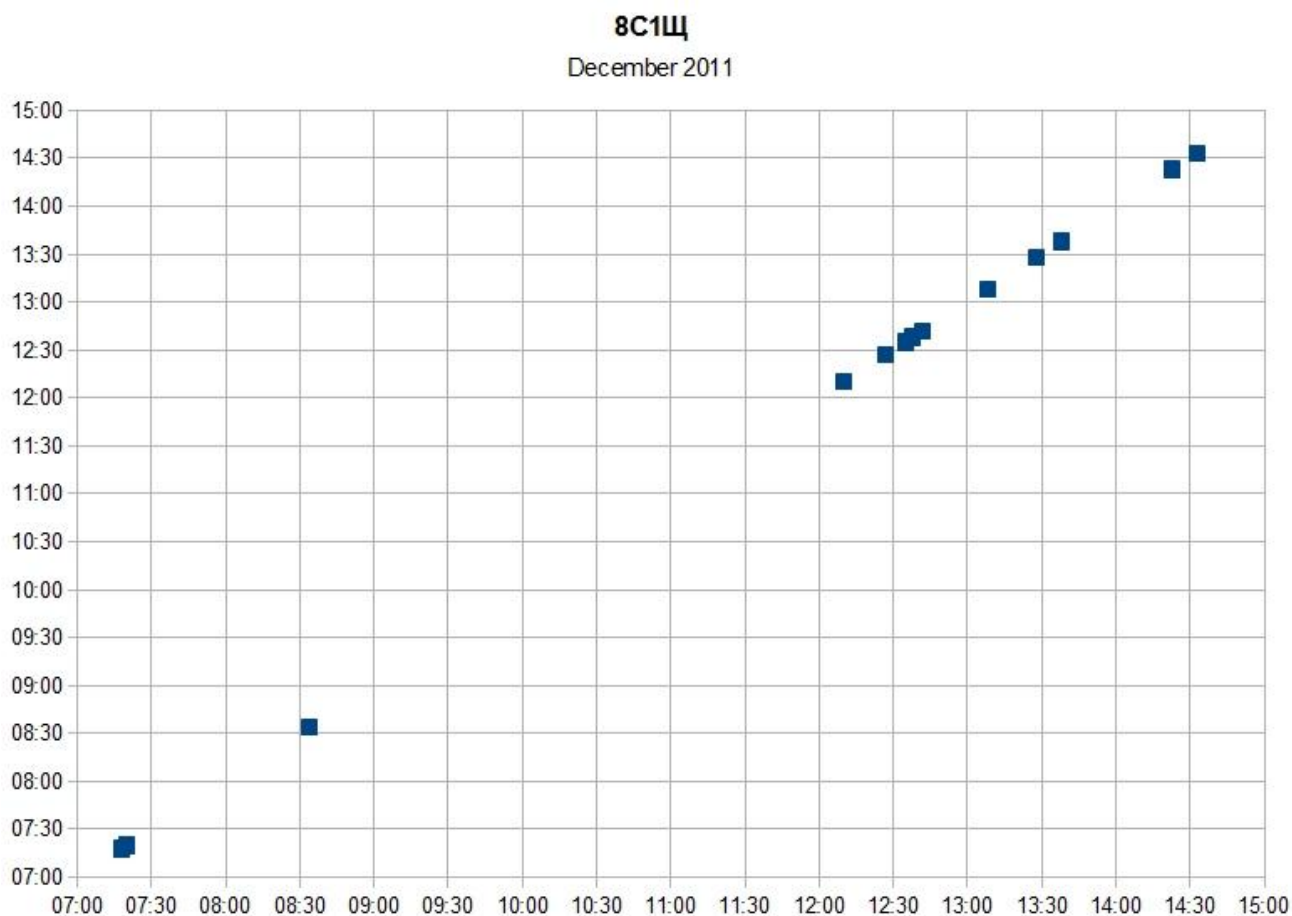
### Schedules

Dlya messages are quite scattered but for the morning and evening sendings there are still a couple sweet spots and monitoring the frequency at those times will most likely yield you a message. This graph shows all Dlya sendings in December.



### 8C1Щ (8S1Shch)

8S1Shch messages are clearly more prevalent on the daytime frequency and thanks to that a much larger number of them has been received in this monitoring period. Unfortunately due to the design of these messages it is very difficult to do analysis on them without committing a lot of resources to it. But here are a couple recordings and a graph of the transmission times.



Besides the above mentioned info I also received a large number of S30 logs from Tucana. Note that daytime frequency (5448 kHz) monitoring started on 09 December.

Thanks for the logs and info, Tucana! With regards to the transcripts also many thanks to Gwraspe, Avare and Trojan719. They have been very helpful.

01-12 0333 UTC 3756 kHz Dlya VTX3 AGDT 'U1B OSOG BO6TS F56SHCH 9GSA ZHBZU 4RVZ 3VS'  
01-12 1334 UTC 3756 kHz Dlya DMTS3 49FT TS2ZA LI27 INNTS SHCHGİP 8TSSHCHİ TZLM FY5E F61N  
01-12 1842 UTC 3756 kHz Dlya F61H 37TSH MUDR 7BHSCH ZH7HZH YMA5 VTKH3 AGDT 'U1B OSOG  
02-12 0330 UTC 3756 kHz Dlya BO6S F56SHCH 9GSA ZHVZA 4RVZ 3VS' DKİ1 6I2ZH ZHD9V Sİ5TS  
02-12 1334 UTC 3756 kHz Dlya DMTS3 49FT TS2ZA LI27 INNTS SHCHGİP 8TSSHCHİ TZLM FY5E  
02-12 1842 UTC 3756 kHz Dlya F61H 37TSH MUDR 7BHSCH ZH7HZH YMA5 VTKH3 AGDT 'U1B OSOG  
03-12 0330 UTC 3756 kHz Dlya BO6S F56SHCH 9GSA ZHBZU 4RVZ 3VS' DKİ1 6I2ZH ZHD9V Sİ5TS  
03-12 1807 UTC 3756 kHz Dlya PYTSM Y8BM 8MUO TUZP 5İ7SHCH BLDKH 27SHCH' N1DU 53OB 78MV  
04-12 0248 UTC 3756 kHz Dlya A3PS 'MSV YGİ' 12SI 79Aİ P'KSHCH 6EKHB 'UE8 TSP3' SHCHT3O  
04-12 1732 UTC 3756 kHz Dlya YMA5 VTKH3 AGDT 'U1B OSOG BO6TS F56SHCH 9GSA ZHVZA 4RVZ  
05-12 0302 UTC 3756 kHz Dlya 3VS' DKİ1 6I2ZH ZHD9V Sİ5TS 62BV 81BR M7KS PMV5 L'Gİ  
06-12 1419 UTC 3756 kHz Dlya P'KSHCH 6EKHB 'UE8 TSP3' SHCHT3O TSIKHS ZH1TR M1SE Z7PM 'O6P  
07-12 0314 UTC 3756 kHz Dlya 37TSH MUDR 7BHSCH ZH7HZH YMA5 VTKH3 AGDT 'U1B OSOG BO6TS  
07-12 1423 UTC 3756 kHz 8S1SHCH 41 914 ANTROINAYA 22 91 49 18  
07-12 1433 UTC 3756 kHz 8S1SHCH 58 725 SIKSTET 97 71 01 16  
07-12 1737 UTC 3756 kHz Dlya V'Z' NLTSE 8'4O AUI8 2ZSHCHN V2MZ ZHSK4 SB7Z TAZ7 PYTSM  
08-12 0333 UTC 3756 kHz Dlya Y8VM 8MUO TUZP 5İ7SHCH VLDKH 27SHCH' N1DU 53OB 78MV A3PS

08-12 1328 UTC 3756 kHz 8S1SHCH 66 341 RUBCHATOST' 29 57 18 37

08-12 1842 UTC 3756 kHz Dlya SHCHGIP 8TSSHCH TzLM FY5E F61H 37TSH MUDR 7BHSHCH ZH7HZH YMA5

09-12 0401 UTC 3756 kHz Dlya VTX3 AGDT 'U1B OSOG BO6TS F56SHCH 9GSA ZHBZU 4RVZ 3VS'

09-12 1028 UTC 5448 kHz Dlya DK1 6I2ZH ZHD9V S5TS 62BV 81BR M7KS PMV5 L'GI TSHCHSHCHS

09-12 1337 UTC 3756 kHz Dlya VKY1 KHTSLF 61KHZH ZBIL L7O6 V'Z' NLTSE 8'4O AUI8 2ZSHCHN

09-12 1712 UTC 3756 kHz Dlya V2MZ ZHCK4 CB7Z TAZ7 PYTSM Y8BM 8MUO TUZP 5I7SHCH BLDKH

10-12 0232 UTC 3756 kHz Dlya 27SHCH' A3PS 53OB 78MV A3NS 'MSV YGI' 12SI 79AI P'KSHCH

10-12 1451 UTC 3756 kHz Dlya DMTS3 49FT TS2ZA LI27 INNTS SHCHGIP 8TSSHCH TzLM FY5E F61N

10-12 1752 UTC 3756 kHz Dlya 37TSN MUDR 7VNSHCH ZH7NZH YMA5 VTKH3 AGDT 'U1B OSOG BO6S

11-12 0408 UTC 3756 kHz Dlya F56SHCH 9GSA ZHBZU 4RVZ 3VS' DK1 6I2ZH ZHD9V S5TS 62BV

11-12 1242 UTC 5448 kHz 8C1SHCH 16 771 ABSENTEIST 88 70 98 31

11-12 1423 UTC 3756 kHz Dlya V'Z' NLTSE 8'4O AUI8 2ZSHCHN V2MZ ZHCK4 SB7Z TAZ7 PYTSM

11-12 1736 UTC 3756 kHz Dlya Y8VM 8MUO TUZP 5I7SHCH VLDKH 27SHCH' N1DU 53OB 78MV A3PS

12-12 0235 UTC 3756 kHz Dlya 'MSV YGI' 12SI 79AI P'KSHCH 6EKHB 'UE8 TSP3' SHCHT3O TSIKHS

12-12 0618 UTC 5448 kHz Dlya ZH1TR M1SE Z7PM 'O6P IKH'I DMTS3 49FT TS2ZA LI27 INNTS

12-12 1133 UTC 5448 kHz 8S1SHCH 49 391 Khabur 43 56 11 68

12-12 1331 UTC 3756 kHz Dlya SHCHGIP 8TSSHCH TzLM FY5E F61H 37TSH MUDR 7BHSHCH ZH7HZH YMA5 VTKH3

12-12 1753 UTC 3756 kHz Dlya AGDT 'U1B OSOG BO6TS F56SHCH 9GSA ZHBZU 4RVZ 3VS'

13-12 0410 UTC 3756 kHz Dlya DK1 6I2ZH ZHD9V S5TS 62BV 81BR M7KS PMV5 L'GI TSHCHSHCHS

13-12 1220 UTC 5448 kHz Dlya VKY1 KHTSLF 61KHZH ZBIL L7O6 V'Z' NLTSE 8'4O AUI8 2ZSHCHN

13-12 1911 UTC 3756 kHz Dlya N1DU 27SHCH' 53OB 78MV A3PS 'MSV YGI' 12SI 79AI P'KSHCH

14-12 0245 UTC 3756 kHz Dlya 6EKHB 'UE8 TSP3' SHCHT3O TSIKHS ZH1TR M1SE Z7PM 'O6P IKH'I

14-12 1527 UTC 3756 kHz Dlya FY5E F61H 37TSH MUDR 7BHSHCH ZH7HZH YMA5 VTKH3 AGDT 'U1B

14-12 1755 UTC 3756 kHz Dlya OSOG BO6S F56SHCH 9GSA ZHBZU 4RVZ 3VS' DK1 6I2ZH ZHD9V

15-12 0359 UTC 3756 kHz Dlya S5TS 62BV 81BR M7KS PMV5 L'GI TSHCHSHCHS VKY1 KHTSLF 61KHZH

15-12 0606 UTC 5448 kHz Dlya ZBIL L7O5 V'Z' NLTSE 8'4O AUI8 2ZSHCHN V2MZ ZHCK4 SB7Z

15-12 1218 UTC 5448 kHz Dlya TAZ7 PYTSM Y8VM 8MUO TUZP 5I7SHCH VLDKH 27SHCH' N1DU 53OB

15-12 1242 UTC 5448 kHz 8S1SHCH 69 873 SUKHOYADNIK 80 78 14 44

15-12 1722 UTC 3756 kHz Dlya 78MV A3PS 'MSV YGI' 12SI 79AI P'KSHCH 6EKHB 'UE8 TSP3'

16-12 0307 UTC 3756 kHz Dlya SHCHT3O TSIKHS ZH1TR M1SE Z7PM 'O6P IKH'I Z'1B NI9V DMTS3

16-12 0836 UTC 5448 kHz Dlya 49FT TS2ZA LI27 INNTS SHCHGIP 8TSSHCH TzLM FY5E F61H 37TSH

16-12 1417 UTC 3756 kHz Dlya MUDR 7VNSHCH ZH7NZH YMA5 VTKH3 AGDT 'U1B OSOG BO6S F56SHCH

16-12 1809 UTC 3756 kHz Dlya 9GSA ZHBZU 4RVZ 3VS' DK1 6I2ZH ZHD9V S5TS 62BV 81BR

17-12 0406 UTC 3756 kHz Dlya M7KS PMV5 L'GI TSHCHSHCHS VKY1 KHTSLF 61KHZH ZBIL L7O5 V'Z'

17-12 1146 UTC 5448 kHz Dlya Y8BM PYTSM TAZ7 CB7Z ZHCK4 V2MZ 2ZSHCHN AUI8 8'4O NLTSE

17-12 1615 UTC 3756 kHz Dlya 8MUO TUZP 5I7SHCH BLDKH 27SHCH' N1DU 53OB 78MV A3PS 'MSV

17-12 1813 UTC 3756 kHz Dlya YGI' 12SI 79AI P'KSHCH 6EKHB 'UE8 TSP3' SHCHT3O TSIKHS ZH1TR

18-12 0448 UTC 5448 kHz Dlya M1SE Z7PM 'O6P IKH'I Z'1B NI9V DMTS3 49FT TS2ZA LI27

18-12 0834 UTC 5448 kHz 8S1SHCH 34 324 ATTICHESKI 89 39 00 10

18-12 1453 UTC 3756 kHz Dlya YMA5 VTKH3 AGDT 'U1B OSOG BO6S F56SHCH 9GSA ZHBZU 4RVZ

18-12 1844 UTC 3756 kHz Dlya 3VS' DK1 6I2ZH ZHD9V S5TS 62BV 81BR M7KS PMV5 L'GI

19-12 0423 UTC 3756 kHz Dlya TSHCHSHCHS VKY1 KHTSLF 61KHZH ZBIL L7O5 V'Z' NLTSE 8'4O AUI8

19-12 0624 UTC 5448 kHz Dlya 2ZSHCHN V2MZ ZHCK4 SB7Z TAZ7 PYTSM Y8VM 8MUO TUZP 5I7SHCH

19-12 1048 UTC 5448 kHz Dlya VLDKH 27SHCH' N1DU 53OB 78MV A3PS 'MSV YGI' 12SI 79AI

20-12 0305 UTC 3756 kHz Dlya IKH'I Z'1B NI9V DMTS3 49FT TS2ZA LI27 INNTS SHCHGIP 8TSSHCH

20-12 0623 UTC 5448 kHz Dlya TzLM FY5E F61H 37TSH MUDR 7BHSHCH ZH7HZH YMA5 VTKH3 AGDT

20-12 1517 UTC 3756 kHz Dlya 'U1B OSOG BO6TS F56SHCH 9GSA ZHVZA 4RVZ 3VS' DK1 6I2ZH

20-12 1759 UTC 3756 kHz Dlya ZHD9V S5TS 62BV 81BR M7KS PMV5 L'GI TSHCHSHCHS VKY1 KHTSLF

21-12 0400 UTC 3756 kHz Dlya 61KHZH ZBIL L7O5 V'Z' NLTSE 8'4O AUI8 2ZSHCHN V2MZ ZHCK4

21-12 0718 UTC 5448 kHz 8S1SHCH 47 313 BIURAT 83 39 42 87

21-12 1101 UTC 5448 kHz Dlya 53OB 78MV A3PS 'MSV YGI' 12SI 79AI P'KSHCH 6EKHB 'UE8

21-12 1926 UTC 3756 kHz Dlya TSP3? SHCHT3O TSIKHS ZH1TR M1SE Z7PM ?O6P I?KH?I? Z'1B NI9V

22-12 1801 UTC 3756 kHz Dlya 81BR M7KS PMV5 L?GI? TSHCHSHCHS VKY1 KHTSLF 61KHZH ZBIL L7O5

23-12 0423 UTC 3756 kHz Dlya V?Z? NLTSE 8'4O AUI8 2ZSHCHN V2MZ ZHCK4 SB7Z TAZ7 PYTSM

23-12 1235 UTC 5448 kHz 8C1SHCH 13 010 FELLO 96 66 12 79

23-12 1428 UTC 3756 kHz Dlya ?MSV YGI?? 12SI 79AI? P?KSHCH 6EKHB ?UE8 TSP3? SHCHT3O TSIKHS

23-12 1739 UTC 3756 kHz Dlya ZH1TR M1SE Z7PM ?O6P I?KH?I? Z'1B NI9V TS2ZA LI27 INNTS

24-12 0335 UTC 3756 kHz Dlya LI27 INNTS SHCHGI?P 8TSSHCH? TzLM FY5E F61N 37TSN MUDR 7VNSHCH

24-12 0604 UTC 5448 kHz Dlya ZH7NZH YMA5 VTKH3 AGDT ?U1B OSOG BO6S F56SHCH 9GSA ZHBZU

24-12 1410 UTC 3756 kHz Dlya L?GI? TSHCHSHCHS VKY1 KHTSLF 61KHZH ZBIL L7O5 V?Z? NLTSE 8?4O  
 25-12 0419 UTC 3756 kHz Dlya AUI8 2ZSHCHN V2MZ ZHSK4 SB7Z TAZ7 PYTSM Y8VM 8MUO TUZP  
 25-12 1210 UTC 5448 kHz 8S1SHCH 24 192 NALIVCHATYI? 51 47 93 86  
 25-12 1224 UTC 5448 kHz Dlya 5I?7SHCH VLDKH 27SHCH? N1DU 53OB 78MV A3PS ?MSV YGI?? 12SI  
 25-12 1645 UTC 3756 kHz Dlya 79AI? P?KHSCH 6EKHB ?UE8 TSP3? SHCHT3O TSIKHS ZH1TR M1SE Z7PM  
 25-12 1921 UTC 3756 kHz Dlya ?O6P I?KH?I? Z?1B NI9V DMTS3 49FT TS2ZA LI27 INNNTS SHCHGI?P  
 26-12 0720 UTC 5448 kHz 8S1SHCH 70 294 VERTOGRAD 18 23 91  
 27-12 0347 UTC 3756 kHz Dlya 61KHZH ZBIL L7O5 V?Z? NLTSE 8?4O AUI8 2ZSHCHN V2MZ ZHCK4  
 27-12 0804 UTC 5448 kHz Dlya CB7Z TAZ7 PYTSM Y8BM 8MUO TUZP 5I?7SHCH BLDKH 27SHCH? N1DU  
 27-12 1238 UTC 5448 kHz 8S1SHCH 52 602 RAZDVOENIE 95 32 36 18  
 27-12 1248 UTC 5448 kHz Dlya 53OB 78MV A3PS ?MSV YGI?? 12SI 79AI? P?KHSCH 6EKHB ?UE8  
 28-12 0355 UTC 3756 kHz Dlya DMTS3 49FT TS2ZA LI27 INNNTS SHCHGI?P 8TSSHCHI? TZLM FY5E F61N  
 28-12 0725 UTC 5448 kHz Dlya 37TSN MUDR 7VNSHCH ZH7NZH YMA5 VTKH3 AGDT ?U1B OSOG BO6S  
 28-12 1227 UTC 5448 kHz 8S1SHCH 59 682 AKROPOMA 06 69 93 96  
 28-12 1454 UTC 3756 kHz Dlya F56SHCH 9GSA ZHBZU 4RVZ 3VS? DKI?1 6I2ZH ZHD9V SI?5TS 62BV  
 28-12 1748 UTC 3756 kHz Dlya 81BR M7KS PMV5 L?GI? TSHCHSHCHS VKY1 KHTSLF 61KHZH ZBIL L7O5  
 29-12 0348 UTC 3756 kHz Dlya V?Z? NLTSE 8?4O AUI8 2ZSHCHN V2MZ ZHSK4 SB7Z TAZ7 PYTSM  
 29-12 1228 UTC 5448 kHz Dlya ?MSV YGI?? 12SI 79AI? P?KHSCH 6EKHB ?UE8 TSP3? SHCHT3O TSIKHS  
 29-12 1739 UTC 3756 kHz Dlya ZH1TR M1SE Z7PM ?O6P I?KH?I? Z?1B NI9V DMTS3 49FT TS2ZA  
 30-12 0405 UTC 3756 kHz Dlya LI27 INNNTS SHCHGI?P 8TSSHCHI? TZLM FY5E F61N 37TSN MUDR 7VNSHCH  
 30-12 1709 UTC 3756 kHz Dlya 4RVZ 3VS? DKI?1 6I2ZH ZHD9V SI?5TS 62BV 81BR M7KS PMV5  
 31-12 0440 UTC 3756 kHz Dlya L?GI? TSHCHSHCHS VKY1 KHTSLF 61KHZH ZBIL L7O5 V?Z? NLTSE 8?4O  
 31-12 1208 UTC 5448 kHz Dlya CB7Z TAZ7 PYTSM Y8BM 8MUO TUZP 5I?7SHCH 27SHCH' N1DU 53OB

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I received a note from Avare, a member of the Priyom team. He writes that the location of S30 and S32 have been found. S30 is also confirmed. Thanks a lot for the coordinates, Avare !!

S30: Rostov-na-Donu, Russia, 47°17'58"N 39°40'25"E

S32: St.Petersburg, Russia, 59°43'50"N 30°1'32"E

Coordinates from WikiMapia

The St. Petersburg location is a known military transmitter complex but I didn't know that S32 actually transmits from this site.

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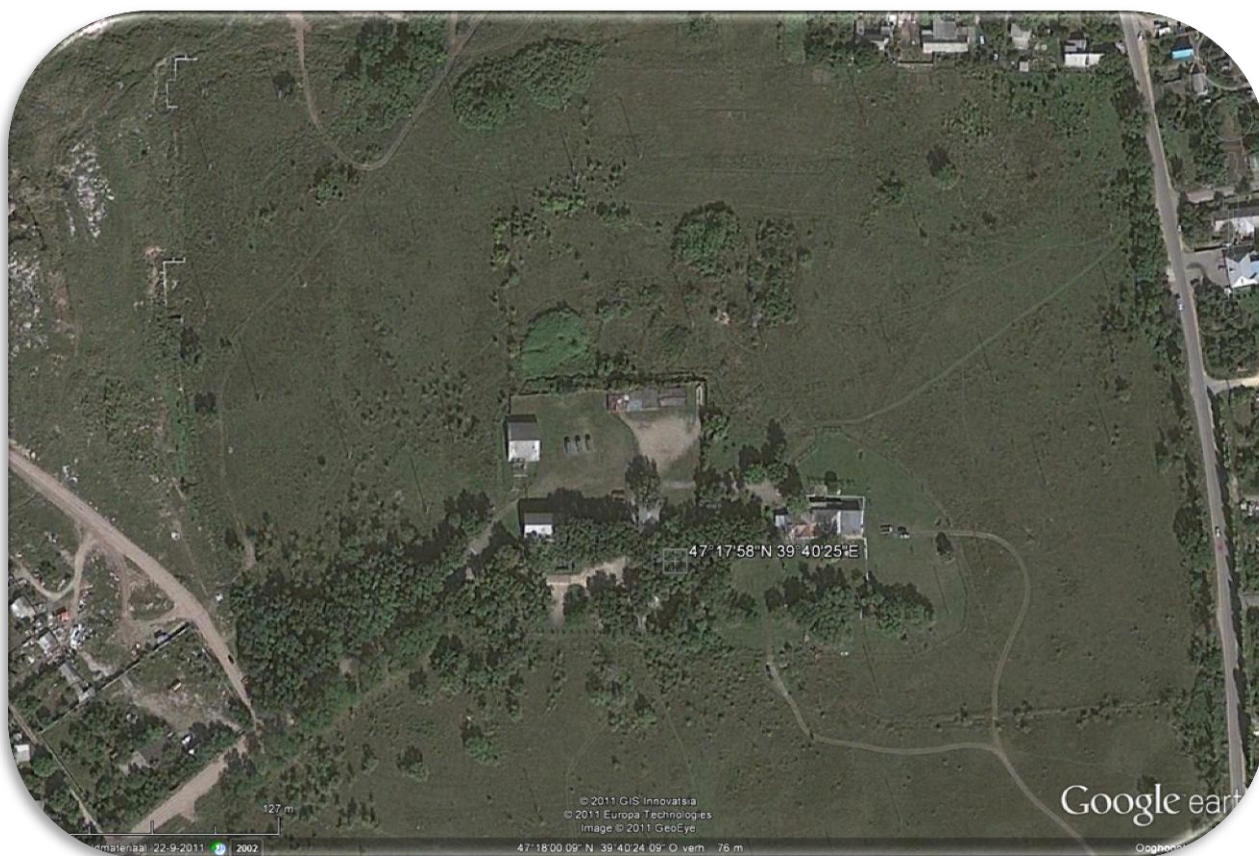
## **S32 – Squeaky Wheel**



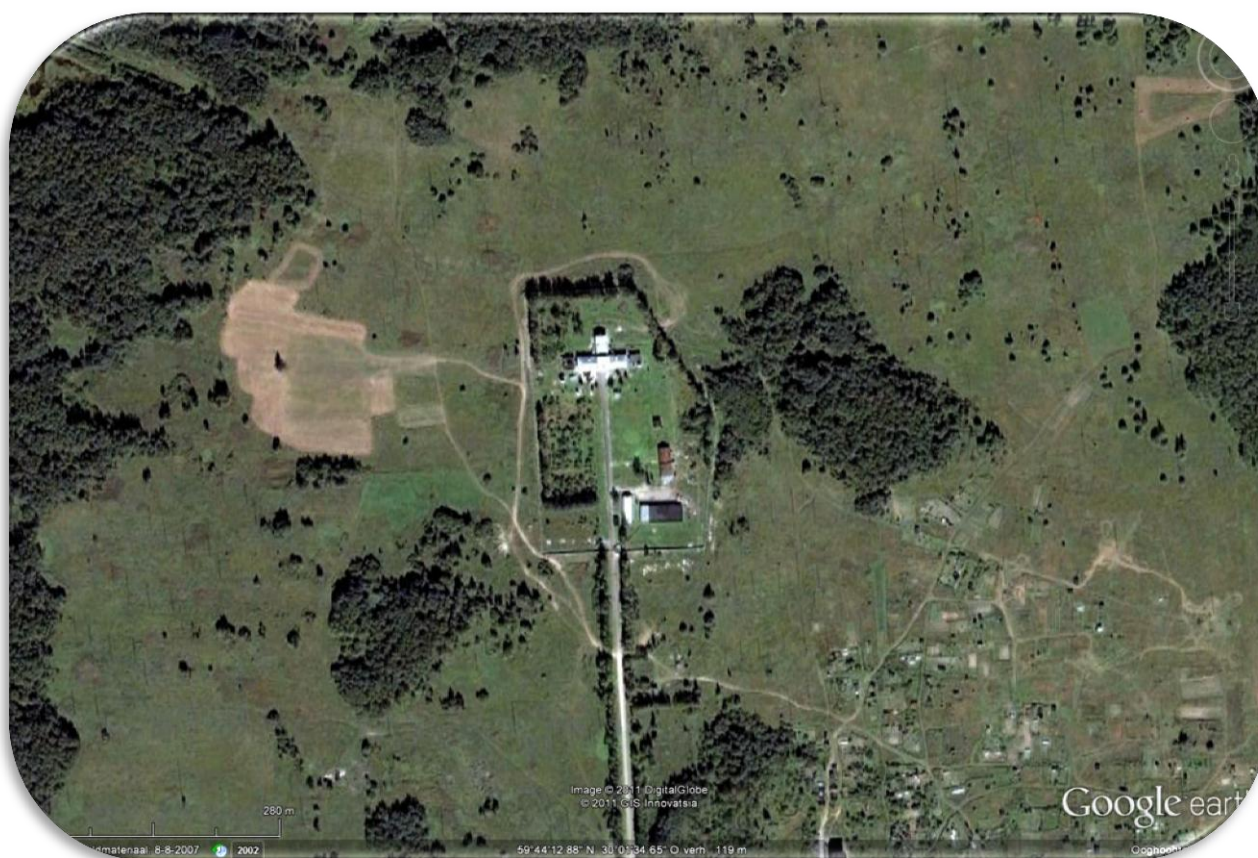
Active on its usual day (5473 kHz) and night (3828 kHz) frequencies throughout the month.

3828 07-12 1426 Al'fa-45 27 348 OSTRYJ 13 00 33 19 Priyom  
 3828 07-12 1437 Al'fa-45 43 384 ASTROLYABIYA 32 26 56 43 Priyom





**S30: Rostov-na-Donu, Russia, 47°17'58"N 39°40'25"E**



**S32: St.Petersburg, Russia, 59°43'50"N 30°1'32"E**

## V07



Token reports that V07 remains active and is well heard on the west coast of the US in its Sunday morning schedule. It is still in the 0100/0120/0140 time period for the 3rd month in a row, however the frequencies for December are different from the ones used in October and November. If the pattern holds true the station might continue using 0100/0120/0140 for January, February, and March of 2012, moving to the 0300/0320/0340 slot in April.

The chart of trends, times, and frequencies used for 2011 is here:

[http://token\\_radio.home.mchsi.com/V07\\_latest\\_sched.jpg](http://token_radio.home.mchsi.com/V07_latest_sched.jpg)

V07 Observations May to December of 2011

	May Call 511	June Call ???	July Call 512	August Call 845	September Call 661	October Call 883	November Call 883	December Call 661
0100						18074	18074	16037
0120						15874	15874	14637
0140						14374	14374	12137
0300					16037			
0320					14637			
0340					12137			
0500	?			14823				
0520	12182			13423				
0540	?			11523				
0700		?	13582					
0720		11182	12182					
0740		?	10282					

Note that on November 20 in the 0100 and 0120 time slots a CW station was sent instead of V07. In this case I believe it is M12. The same ID was sent, 883, as should have been sent for V07 in that time slot. This was a null msg so the 0140 time slot was not populated. Based on this reception I have been assuming there might be an M12 related to this V07 schedule, but looking in the hours before and after the V07 times I have not yet found one.

T!

Mojave Desert, California USA

Token's logs can be found in our Logs Section.

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## V13 – New Star Broadcasting Station

星星廣播電台 Xīngxīng guǎngbò diàntái



Frequency: 13200 kHz until December 6<sup>th</sup>. Changed frequency to 7580 and 7688 kHz.  
Schedules at 0500, 0600, 0700, 0800, 1200, 1300 UTC.

Aoiki mentions New Star in its list of broadcasting schedules. It is however not very likely that all the listed schedules are actually New Star. Like 7553 (7552) kHz which is actually used by V24. So far the well-



known schedules at 0500, 0600, 1200 and 1300 UTC have been confirmed, and also 0700 and 0800 UTC. V24 was heard on 7552 kHz at 1324 UTC.

9557 kHz, 0200-0230 UTC  
9557 kHz, 0300-0330 UTC  
9570 kHz, 0400-0430 UTC  
7580 kHz, 0500-0530 UTC

7580 kHz, 0600-0630 UTC  
7688 kHz, 0700-0730 UTC  
7688 kHz, 0800-0830 UTC  
7553 kHz, 0900-0930 UTC

7580 kHz, 1200-1230 UTC  
7580 kHz, 1300-1330 UTC  
7553 kHz, 1330-1400 UTC

Westli reports that Station #4 operates on 7580 kHz and Station #3 is on 7688 kHz.

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## V21 – Cuban Babbler



It has been a while but westt1us copied the station again.

5637 kHz, 1400 UTC, 26-12: Too weak to hear numbers but definitely V21  
5637 kHz, 1400 UTC, 28-12: Weak but numbers were audible today  
5637 kHz, 1400 UTC, 31-12: heard a microphone keyed several times then heard "41" or "40 1".

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## V24

I received an extended V24/M94 report from Token. The logs can be found in the Logs Section. THANKS TOKEN !!

*V24 and M94 have once again undergone some fairly substantial changes in frequencies and schedule. Starting November 6, 2011, I noticed a new frequency in use by V24, 6310 kHz. Since a couple weeks before that date I have not seen 6730 or 6330 kHz in use. My assumption is that about November 1, 2011, the frequencies of 6730 kHz and 6330 kHz were discontinued and the new frequency of 6310 kHz was added.*

*The total number of messages each month have not reduced by any appreciable number, so it appears the activity that was on 6730 and 6330 kHz has shifted to the still active freqs. For the most part the 6730 kHz activity appears to have shifted to 6310 kHz and the former 6330 kHz activity has shifted to the remaining freqs, for example the 6330 kHz M94 slots have moved to 5715 kHz, but on the same days and at the same times as when on 6330 kHz.*

*Fewer and fewer 4f format messages are being sent, the vast majority are now 5f.*

*The latest schedule of V24 and M94 transmissions can be found here:*  
[http://token.radio.home.mchsi.com/V24\\_M94\\_latest\\_sched.jpg](http://token.radio.home.mchsi.com/V24_M94_latest_sched.jpg) (larger than the one in N&O)

*This schedule is still somewhat tentative and in work, but should be fairly accurate. But notice I am no longer including the version number or date in the URL, the intent is to keep the most current version at that URL from now on.*

*Note that the schedule contains a time column not seen on previous schedules I made, in this case 1240 UTC. There have been a couple of transmissions in this time slot so I have included it on the schedule, but*

***I will remove that column if these transmission do not repeat in the future. In the past V24 has used XX20 and XX40 time slots, but never for very long other than the 1620 time slot, which was used for over a year. In fact a few times it has used the XX20 and XX40 before the normal 1200 UTC start time.***

***T!***

***Mojave Desert, California, USA***

Schedule for V24 and M94 transmission predictions, Version 4. The last four remaining M94 time slots are highlighted in **BLUE**. 4600, 4900, 5115, 5715, 6215, and 6310 kHz are all active. 6310 noted in use Nov 05, and 6730 and 6330 have been removed from use. Most 6730 freqs appear to have converted to 6310 and most 6330 have converted to 5715

Some time slots are only used every other month.

(P) = Possible based on past habits but not yet confirmed.

?? = Formerly on 6730 or 6330 but not yet confirmed on new frequencies or in new time slots.

V24/M94 Schedule as of December 31, 2011

Day	1200	1230	1240	1300	1330	1400	1430	1500	1530	1600	1630
1				5715 (P)				??	4900		
2				5715 (P)				6215	5115		
3				5715 (P)	??		5715	6215	5115		
4				5715 (P)	??		5715	4900			
5						5115	??	4900			6310
6				6310		5115	??		6310	6215 (P)	6310
7				6310			4600			6215 (P)	
8							4600		4600		
9		6215 (P)			6310				4600	6215 (P)	
10		6215 (P)			6310	M94 5715	5715	6215	??	6215 (P)	5115
11						M94 5715	5717	6215	5715	6215	5115
12	5715 (P)								5715		5115 (P)
13	5715 (P)						5715 (P)		6310		5115 (P)
14	4900 (P)			??					6310		
15	4900 (P)						6310				
16							6310	4900			
17								4900	5115		
18				5715	??			6215	5115		
19				5715	??			6215			6310
20						5115	5715	5115			6310
21						5115	5715	5115	??	6215 (P)	
22				??			4600		??	6215 (P)	5115
23					6310		4600				5115
24				5715	6310				4600	6215 (P)	
25			5715	5715					4600		
26						M94 5715		6215			
27				6310		M94 5715		6215			
28			4900	6310					5715	6215	
29									5715	6215	
30											
31								5115	4900		

## **V30 – Vietnamese numbers**



**10255 kHz, 17-12, 1555 UTC, Male voice. Message**

## **VC01 – Chinese Robot**



Chinese Air Defense network

Modes: USB and LSB .

The first UDXF log of the Chinese Robot was on 27-3-2000. We found the station since that date on the following frequencies: 3036, 3749, 3837, 4075, 4410, 4422, 4427, 4480, 4530, 5288, 5303, 5328, 5700, 5832, 6479, 6771, 6840, 6855, 6860, 6949, 6960, 7090, 7608, 7684, 7726, 7744, 7756, 7770, 7792, 7864, 7865, 7880, 7890, 7924, 8000, 8025, 9000, 9169, 9192, 9290, 9340, 10508 kHz.

5328 kHz, 01-12, 1204, 1833 UTC

5328 kHz, 02-12, 1540 UTC

5328 kHz, 04-12, 1401 UTC

3749 kHz, 30-12, 1435, 1516 UTC

7792 kHz, 31-12, 0805 UTC

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## **VC03**



10134 kHz, 04-12, 1519 UTC: OM reciting groups of numbers. Operator also switched to unknown secure mode. It sounded quite similar to ANDVT. (Brandon via Solarix)

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## **MORSE STATIONS**

### **MX - Russian Military beacons**



Reported beacons and channel markers.

European Cluster Beacons: D, P, S, C, A, L

Asian Cluster Beacons: F, K, M

Channel markers: V - 3658, 4961 kHz

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## **M03**



5358 kHz, 1535 UTC, 03-12: 798/00

4828 kHz, 0820 UTC, 04-12: 761/00

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## M12



5312/4512/4012 kHz, 28-12, 2200/2220/2240:  
4012 kHz is new in this schedule.

350 350 350 1  
740 95 740 95  
85356 22462 66517 27015 16279 81409 81547 61027 90095 71566  
11745 97626 70636 12244 08764 76533 46949 01822 09001 97696  
77271 91865 90090 75815 14819 95664 80395 09435 35333 89516  
89774 06764 81722 74475 08703 71620 01112 06642 22471 73975  
54465 87029 87420 74672 90963 74037 26022 23524 91747 50540  
55473 32998 25776 41717 16234 27598 35228 79212 00020 29779  
76749 74393 15762 82453 07848 70660 48500 66355 06268 07106  
19183 31081 08590 82506 08255 04887 20355 00785 56656 26361  
92646 94375 71148 97071 66429 19583 82408 40251 86581 40009  
94444 74573 76480 79967 20530  
000 000

10343/9264/8116 kHz, 29-12, 1700/1720/1740 UTC:

124 124 124 1  
7315 73 7315 73  
65851 19238 19192 77127 10794 63253 59494 03602 83937 16764  
45059 66204 42300 97065 57794 36059 62755 \_4808 92176 48318  
10517 88442 21762 32522 93167 93397 92065 55630 00539 53362  
91897 06827 75255 83867 95288 09554 41205 40634 79342 05033  
14607 25538 52636 16816 00302 32289 35304 21406 48422 56627  
06524 04471 14209 59519 72058 91008 58768 99014 77269 83744  
88073 37202 29617 47923 02967 38528 45080 98946 63119 77028  
40143 01778 22977  
000 000

9176/7931/6904 kHz, 29-12, 1700/1720/1740 UTC:

257 257 257 1  
2801 67 2801 67  
74299 41199 10215 20195 65472 46\_\_9 01679 49 \_61 08364 83708  
10942 84700 25992 62932 92280 96267 89764 23642 83197 28680  
76373 41661 39721 11490 94175 40449 23472 00664 29859 15291  
70762 17672 03651 02082 97539 91313 36088 88738 73583 09421  
95831 38814 99957 92113 21549 49220 92288 90320 51443 23676  
56472 53002 02746 94654 63587 62263 32432 01463 03131 13369  
23690 00309 45346 76746 41347 23\_\_ 32226  
000 000

9176/7931/6904 kHz, 26-12, 1800/1820/1840 UTC:

257 257 257 1  
7705 48 7705 48  
07634 56579 83337 62372 17646 04215 09698 10817 35381 61669  
41530 24237 41529 67550 23918 56732 96094 76844 41045 54842  
48566 35183 90964 63861 16619 02707 49502 95920 41750 58850  
54293 92119 36832 82206 10117 44010 58797 61906 10337 17868  
32851 47203 19417 20225 72835 73156 36004 98890  
000 000

An oddity appeared at approximately 18:04:35 UTC. A slight pitch change can be heard in the recording at 2m31s:  
<http://danix111.cba.pl/m12/audio/M12-9176CW-20111226-1802z-msg-ByDanix.ogg>

6909/5709 kHz, 21-12, 1520/1540 UTC:

214 214 214 1  
977 75 977 75  
46188 01728 42268 73928 46713 89518 69575 15867 95096 57797  
78359 51389 55209 52643 53841 97289 68650 93071 68044 64038  
36635 64168 69532 99436 65169 75036 53438 07302 72785 15682  
40254 28055 49451 12928 42058 23569 73236 64250 33849 28694  
19255 87480 76579 61218 51580 47930 02126 57123 93141 96040  
01760 97793 \_\_815 12650 26335 68887 41258 52517 22425 25884  
43170 93827 33829 46043 72989 29414 13744 40450 89816 88280  
63070 31054 94201 17514 46493  
000 000

4443/5043/5843 kHz, 27-12, 0440/0500/0520 UTC:

408 408 408 1  
548 189 548 189  
78233 92086 88670 71063 67075 68484 98608 12156 36838 84187  
71716 29592 76321 16329 47717 60214 72383 56487 99477 85290  
39980 58597 95967 36088 84294 21166 76976 99581 92183 33879  
93566 30349 05337 81039 65869 44172 13521 16725 22302 47880  
80319 83987 46902 35748 79979 69233 30570 08640 97302 54480  
98442 70101 00252 25384 88020 98084 25614 35770 96561 54557  
15920 98436 73931 14806 06229 52454 79430 40262 80814 67616  
41111 98242 21249 55424 88508 39976 52159 60283 31779 20121  
59889 52428 30268 13753 82056 56689 28237 17893 16646 76985  
79889 16574 07171 75344 92499 96866 09761 59273 63394 58189  
65494 21615 81916 89638 06751 66380 45841 98573 22367 81626  
91816 97311 63025 20382 62761 76209 84101 17994 67996 68910  
29911 48635 37315 81862 73888 19635 51751 24326 00275 60539  
09137 61097 32394 84135 01708 71878 19659 37611 68680 76634  
95776 10776 19427 57419 98427 15583 16970 20807 37651 63318  
14527 70780 15131 60774 16933 43114 05336 43551 79680 36503  
78100 00533 39601 30123 87833 54755 58714 54656 36484 27281  
56251 74261 56228 20125 80129 75675 23541 11772 48266 09695  
15147 67966 85046 58933 92519 33376 73798 65998 45485  
000 000

6909/5709 kHz, 28-12, 1520/1540 UTC:

A LOT of problems when sending that message at 1520z (1540z was fine). Here is a sample: <http://danix111.cba.pl/m12/audio/M12-6909CW-20111228-1522z-msg-ByDanix.ogg>

214 214 214 1  
246 129 246 129  
21615 50686 41628 03537 89039 82244 29314 89873 49370 10238  
52275 73602 71755 19256 40921 08071 93122 42408 03274 76469  
21305 32648 52107 73731 91124 47123 14033 36997 46264 26079  
47117 49852 95965 22381 00718 47447 57369 54585 50998 12221  
49760 03688 69338 88923 56842 58926 81934 78515 57107 67997  
90460 79918 63747 44884 02448 04585 66342 60701 25844 75893  
51311 22882 36573 27287 60460 24137 86062 57489 95961 46751  
80186 04496 59470 16720 99513 11142 95461 48405 30093 64468  
31869 27584 20885 65261 10417 53267 99241 68848 26988 51175  
00907 13523 20286 02\_\_7663\_\_221 34380 00356 15828 37446  
72129 26209 10401 53561 81936 76782 49324 69835 83651 57235  
33672 89101 70924 37150 02786 71009 00399 34364 37016 55272  
61696 21789 37964 82795 90768 83755 79901 20262 04486  
000 000

Other logs:

The transcripts on the right were copied by Danix.

4443 / 5043 kHz, 20-12, 0440/0500 UTC: 408 000

5784 / 7584 kHz, 22-12, 0600/0620 UTC: 751 000

4443 / 5043 kHz, 22-12, 0440/0500 UTC: 408 000

9223 / 8193 kHz, 26-12, 1300/1320 UTC: 214 000

And last but not least: Danix has created a M12 study page <http://danix111.cba.pl/m12/>

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## **M18**



M18 was active on 3803 kHz. It sent the time as UTC+4 and UTC+5 hours. The time was 1 to 5 minutes off. At 0354 UTC on 22-12 it sent time string 1957, which is 12 hours and 3 minutes later than local Moscow time!! Odd station ☺

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## **M21**

**Soviet Air Defence Forces**  
**Voyska Protivo Vozdushnoy Oborony**  
**Во́йска ПВО Voyska PVO**



Id ?: 2738.5, 3322, 4990, 5861, 9091 kHz  
Id 0: 3322, 4951.5 kHz  
Id 8: 4865.5, 5752, 11504 kHz  
Id 9: 6222.2 kHz

---

## **M22 – 4XZ - Israeli Navy**



Heard on:

6379 kHz, 26-11, 2113 UTC

2680 kHz, 02-12, 2026 UTC

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**M31**  
**French military voice/CW stations**



Former Enigma station M31 is still alive so I thought that it would be nice to mention it once again.

5010.0 kHz, 30-11, 0651 UTC, CW: French Air Force Narbonne. "VVV VVV VVV DE FDI22 FDI22 FDI22 AR"  
7591.5 kHz, 20-12, 1104 UTC, USB: French Air Force test tape  
5077.5 kHz, 24-12, 1421 UTC, USB: French Air Force test tape

Test tape: "*Ceci est une emission de Calorie destine au reglage de votre recepteur lundi mardi mecredi  
jeudi vendredi samedi dimanch 301 302 303 304 305 306 307 308 309 janvier fevrier mars avril mai juin  
juillet aout septembre octobre novembre decembre*"

---

**M32**      **Russian/CIS/Ukrainian**  
**Military SSB & CW Stations**



13996 kHz, 15-12, 0828 UTC:

ZP6P: Russian Mil Moscow area, strategic operational link, outstations probably in the Far-East. Schedule start of day with NON, tuning bursts, some morse "vvvv", at 0916 A1A with NCS error; "im8l im8l im8l de iiii iiii" followed by A1A callup of outstations; "im8l im8l im8l de zp6p zp6p k" "f9fv f9fv f9fv de zp6p zp6p" and "rk"'s. Outstation not heard or duplex. Later passing several 34 group telegrams (time stamped in UTC+4h Moscow time area) - to individual stations as well as collective 9A1R. At 1131 problems with schd switching to night frequency; "9a1r 9a1r 9a1r qly2 no qly2 no k". NCS loosing contact with outstations and finally give up (on this frequency) at 1253 UTC.

16128 kHz, 30-11, 0916 UTC:

KPKA: Russian Mil Moscow area, probably army, strategic operational link Moscow/Far-East, 0916, A1A callup to outstation HDTE and into passing qtc # 269, sporadic activity until 1140utc when problems changing to night frequency usage; "hdte hdte hdte de kpka kpka qly2 no qly2 no k" final activity at 12 UTC when KPKA gives up after several failing calls to his outstation.

---

## M89 – Chinese military



VVV Q2M Q2M Q2M DE NYZ NYZ QSA? k	4860, 6840 10640 kHz
V 7NPE 7NPE 7NPE DE QV5B QV5B	4225, 5500, 7582, 8110 kHz
V DKG6 DKG6 DKG6 DE 3A7D 3A7D	3642, 5358, 5801, 7602, 10180 kHz
V GKVZ GKVZ GKVZ DE Q7NW Q7NW	3297, 5278 kHz
V RXP7 RXP7 RXP7 DE CZT2 CZT2	4474, 5676, 6688, 6868, 8024, 8787 kHz
V H2FL H2FL H2FL DE DRV8 DRV8	3797, 3807, 4512, 4532, 6773, 8040 kHz
V WITN WITN WITN DE GNXG GNXG	4607, 7607, 8789, 10779 kHz
V HJ4I HJ4I HJ4I DE YI4K YI4K	4767, 4982, 5207 kHz
V OPN9 OPN9 OPN9 DE GYVR GYVR	5332 kHz

10779 kHz, 06-12, 0036 UTC:

V WITN WITN WITN DE GNXG GNXG  
SVC GA NR 32 0845 RMKS 7483 TO 9503 BT  
COMM/0930/LZ3324/7580/9503 AR  
HWR WK NR 34 QSL ? (Return to round-slip at 0037z)  
V WITN WITN WITN DE GNXG GNXG

10779 kHz, 07-12, 0000 UTC:

V WITN WITN WITN DE GNXG GNXG  
SVC GA NR .7 0... RMKS 74.. TO ..75 BT  
COMM/0.../...../7489/7.70 AR  
QSL? WK NW 1(Return to round-slip at 002z)  
V WITN WITN WITN DE GNXG GNXG

3297 kHz, 22-12, 1641 UTC:

V GKVZ GKVZ GKVZ DE Q7NW Q7NW  
MSG NR 088 CK 301 46 1223 0030 BT 3N67 AR  
V GKVZ GKVZ GKVZ DE Q7NW Q7NW

3297 kHz, 31-12, 1729 UTC:

MSG NR 024 CK 301 46 01 01 0130 BT NTAN AR  
1741 UTC: Repeats msg  
1755 UTC: V GKVZ GKVZ GKVZ DE Q7NW Q7NW

## M94

See V24 for the full report. The CW message for November 20, 2011 was as follows:

883 883 883 TTT 883 883 883 TTT 883 883 883 TTT 883 883 883 TTT  
883 883 883 TTT 883 883 883 TTT 883 883 883 TTT 883 883 883 TTT

The logs are in the Logs Section.



### **M97 – Vietnamese numbers**

**Frequency: 10375 kHz**

**Mode: Morse**

01-12, 1455 UTC	Repeat of SD 65 and SD 66
02-12, 1455 UTC	SD 65 KKK SD 65 KKK SD 65 KKK
05-12, 1501 UTC	Repeat of SD 65 and SD 66
07-12, 1502 UTC	SD 66 sent, lost the station after that
10-12, 1455 UTC	SD 66 sent, lost the station after that
12-12, 1455 UTC	Repeat of SD 65 and SD 66
15-12, 1528 UTC	In progress SD 66 sent
17-12, 1506 UTC	SD 65 and SD 66
17-12, 1519 UTC	SD 65 and SD 66
23-12, 1455 UTC	SD 65 and 66 sent

**Message sample:**

**AAAAAAAAAAAAAAAAAAAA**  
**SD 65 KKK SD 65 KKK SD 65 KKK**  
**HT HT HT**  
**SN 80 SN 80 SN 80**  
**47118 52489 43100 94916 77996 40849 44635 59664 91856 62647**  
**48955 77958 62681 98142 63146 41036 15091 64668 35293 48222**  
**69605 75478 59905 94347 08402 29903 20106 63539 90858 95800**  
**14788 50800 49646 49558 31093 42477 93028 26995 30499 23129**  
**56233 91117 06603 65105 62822 67351 43230 07004 14713 23019**  
**85105 12346 39350 84708 30754 75722 40201 65393 35854 54337**  
**79271 90826 63437 89154 25480 95590 78518 81920 56272 84005**  
**16039 64430 19599 01237 75525 27765 91206 05562 79055 05059**  
**KKKKKKK**

[illegible]

**Silent for 1 minute**

**Repeats entire sked at 1507z – Finished at 1517z – Silent for 1 minute**

**Repeats entire sked again at 1518z – Finished at 1530z**



## MC03 – Chinese Air Defense

Although not 100% certain, the often reported air defense station is most probably transmitting from China. N&O has designated MC03 to this station. The database has been updated accordingly.

5375 kHz, 2327 UTC, 03-12: cut number strings and local time T7U7 (UTC+8)  
 7988 kHz, 0011 UTC, 07-12: cut-number messages and local time "TDAA"  
 5399 kHz, 2322 UTC, 09-12: cut-number messages and local time "T7UU"  
 4836 kHz, 1458 UTC, 18-12: cut number string + local time 1D5D5T5N UU57 (UTC+8)  
 3698 kHz, 1645 UTC, 18-12: cut numbers, grid tracking  
 4181 kHz, 1808 UTC, 18-12: parallel frequency to 3698 kHz, cut numbers grid tracking  
 4181 kHz, 1620 UTC, 24-12: cut number grid tracking  
 4990 kHz, 1645 UTC, 24-12: cut number grid tracking; parallel frequency to 4181 kHz

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## VARIOUS MODES



## M42 & X06 - Russian Government / Intelligence

9001.25	30-11	0640	Russian Gov/Intel. Mode: RUS-ARQ 100/2000
14970	30-11	0718	Mazielka. Sequence: 216354
17433.5	30-11	0738	Russian Gov/Intel. "51040551184964800=84141". Mode: Baudot 200/500
14448.2	30-11	0903	Russian Gov. Mode: CROWD-36
4850	01-12	0430	Russian Gov/Intel. RBI clg RII2 for signal check.
4570	01-12	0550	Russian Gov. Mode: F1B Morse + RUS-ARQ. " rhm2 rhm2 rhm2 de rzt76 rzt76 zhc ?
5325	01-12	0540	Russian Gov. Mode: F1B Morse + RUS-ARQ. "rbw rbw rbw de rnd79 rnd79"
16219	02-12	0926	Mazielka
14644	02-12	1325	Mazielka
5133	03-12	2030	Russian Gov/Intel. Mode: Baudot 200/500
4850	06-12	0500	Russian Gov/Intel: RBI wkg RJW2, RII2. Mode: CW + Baudot 1,5 stb/50/500R(E) using reversed polarity for traffic to RJW2 and erect polarity for traffic to RII2
16317	06-12	0730	Mazielka. Sequence: 612534
4028	07-12	2000	Russian Gov/Intel. Mode: Baudot 200/500
14863	09-12	0901	Mazielka. Sequence: 615243
16117	12-12	1045	Mazielka. Sequence: 463125
8083	13-12	1650	Russian Gov/Intel. Mode: FSK 200/1000
6794	13-12	1700	Russian Gov/Intel. Mode: FSK 200/1000
5141	13-12	1710	Russian Gov/Intel. Mode: FSK 200/1000
3712	13-12	2100	Russian Gov/Intel. Mode: FSK 200/1000
5405	13-12	2120	Russian Gov/Intel. Mode: FSK 200/1000
5435	13-12	2200	Russian Gov/Intel. Mode: FSK 200/1000
4619	13-12	2210	Russian Gov/Intel. Mode: FSK 200/1000
4015	13-12	2220	Russian Gov/Intel. Mode: FSK 200/1000
6794	13-12	2310	Russian Gov/Intel. Mode: FSK 200/1000
11025	15-12	0706	Russian Gov/Intel. Mode: F1B 100/500.
6600	16-12	0420	Russian Gov/Intel. RUU76 skg RUA41. Mode: FSK CW + F1B 100/1000

7964	19-12	1640	Russian Gov/Intel. Mode: FSK 200/1000
6884	19-12	1644	Mazielka. Sequence: 612534
5347	19-12	1650	Russian Gov/Intel. Mode FSK 200/1000
16115	24-12	1041	Mazielka. Sequence: 215346
13690	24-12	1106	Mazielka. Sequence: 216354
14970	24-12	1423	Mazielka. Sequence: 216354
4569	27-12	0548	Russian Gov/Intel. Mode: FSK 200/1000
16317	27-12	1004	Mazielka. Sequence: 612534
18042	27-12	1337	Russian Gov. Mode: Baudot 75/500. Message on link 70103. Preamble "11100 70103 34789 27086 04039"
8083	27-12	1650	Russian Gov/Intel. Mode: FSK 200/1000
6795	27-12	1700	Russian Gov/Intel. Mode: FSK 200/1000
5141	27-12	1710	Russian Gov/Intel. Mode: FSK 200/1000
3712	27-12	2100	Russian Gov/Intel. Mode: FSK 200/1000
4595	27-12	2110	Russian Gov/Intel. Mode: FSK 200/1000
5404	27-12	2120	Russian Gov/Intel. Mode: FSK 200/1000
5435	27-12	2200	Russian Gov/Intel. Mode: FSK 200/1000
4619	27-12	2210	Russian Gov/Intel. Mode: FSK 200/1000
4016	27-12	2220	Russian Gov/Intel. Mode: FSK 200/1000
7826	27-12	2300	Russian Gov/Intel. Mode: FSK 200/1000
6795	27-12	2310	Russian Gov/Intel. Mode: FSK 200/1000
7691	30-12	0610	Russian Gov/Intel. Mode: FSK 200/1000
6840	30-12	0710	Russian Gov/Intel. Mode: FSK 200/1000
8089	30-12	0720	Russian Gov/Intel. Mode: FSK 200/1000
10270	30-12	1015	Russian Gov/Intel. Mode: Baudot 200/500
12209	30-12	1025	Russian Gov/Intel. Mode: Baudot 200/500
14432	30-12	1035	Russian Gov/Intel. Mode: Baudot 200/500

## XP family



XPA, 5818 kHz, 0540 UTC, 08-12: 890 000 03985 00001 00000 10140

XPA, 5864 kHz, 06-12, 1940 UTC

XPA, 8164/7364/5864 kHz, 1900/1920/1940 UTC

138 138 138 1 138 138 138 1 138 138 138 1  
00212 00227 71192 39256 63041 08881 99055 43838 09604889992883644 52703 94323 95346 03571 73096 96409  
59870 60556 61371 24718 66188 65321 06800 46864 37941 75404 73968 23657 23365 31017 44246 73644 32033  
57574 29211 82820 51280 25940 53506 27189 14572 27553 31591 74790 02192 92606 93044 95617 15346 22066  
00172 07478 41457 32458 81179 79084 47742 72601 31897 07825 72596 67044 14200 97288 42878 73254 47955  
00644 72331 41310 84825 55704 84688 62223 42080 00006 50667 27070 92239 21157 93343 01673 37218 91806  
30957 73993 43244 63645 37391 86546 82536 18306 06422 41400 79247 75965 33242 77038 65897 57491 37237  
66852 14582 34872 06148 08449 07191 18207 39393 76080 44395 97147 94540 58602 81944 90228 05129 82363  
40829 47866 24443 88510 37886 30787 60779 34756 21852 25124 40050 21790 26506 91048 11931 99497 16019  
17213 29293 11849 64470 33650 30659 10203 27659 02692 71494 11267 94543 51364 45940 59070 89022 98975  
09194 29454 60403 42418 96426 51426 31764 09298 45693 28210 49375 69534 78643 98952 14328 22529 85705  
10928 75475 21367 68176 84956 18249 31172 41745 77780 43745 29080 58011 70099 49194 68001 08170 00447  
29489 31955 15728 73685 13136 75279 04527 39429 22003 66562 12936 18028 27088 32497 06969 68026 17881  
93152 15092 35990 79990 24052 35251 32318 11192 84662 36192 94549 00746 88709 84502 60538 59294 22856  
41228 48824 69591 21196 64633 49633 78790 57037 21062

## UTILITY ROUND-UP

### Unid numbers on 11000 and 16000 kHz

This odd station has been reported 7x now. According to some the accent is Italian while others think that the announcer has Indian, Pakistani or Arab roots.

- The transmission is in English (male voice)
- It starts with "Golf Romeo three five, November Oscar one two five, Message".
- Golf Romeo means Groups, 35 is the number of groups.
- The message itself consists of 5-letter groups.
- The transmission is in USB.
- The message is sent 5 times.
- So far it has sent the following message over and over since 26 October.
- Schedule: if any, 1x reported at 0542 UTC, 1x at 1600 UTC, all others between 1430 and 1530 UTC
- Frequencies: 11000 and 16000 kHz

GR35

NO125

MESSAGE

KLPAS BDMGC SPADM SPILB KADCC SBAPP OCMZO PADZZ SPAIK CISBK

QUVAD APCNS SBAAA NOZII KKQUS CAPAA NBOKF EPFFZ PACCM SBADN

KLPAS NNCOM SIKSF PCPIF MKQZF SQUFB SIMCD SPPGC MSNQU ZOIKF

CEPQU VIIOA FFEKS NZPAC LOPSS

Logs so far:

16000 kHz, 0542 UTC, 26-10. Copied by linkz. Recording on the N&O website

16000 kHz, 1434 UTC, 20-12. Copied by linkz. Recording on the N&O website

16000 kHz, 1450 UTC, 24-12. Copied by Token in California.

11000 kHz, 1434 UTC, 31-12. Copied by Jan (reported via Enigma 2000)

11000 kHz, 1454 UTC, 31-12. Copied by Danix (report via Enigma 2000)

11000 kHz, 1429 UTC, 01-01. Copied by Manolis and several others (report via Enigma 2000)

11000 kHz, 1520 UTC, 01-01. Copied by Manolis

11000 kHz, 1600 UTC, 01-01. Copied by Fritz and Manolis

The DF points towards 80°. This is a line from Switzerland over Ukrainian Donezk towards Uzbekistan (source: Fritz)

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## Beacons

### Driftnet beacons:

1858.0 kHz: WN8 driftnet beacon, 3x with long dash. every 3 minutes

1888.0 kHz: BT0 driftnet beacon, 3x with long dash. every 3 minutes

1902.0 kHz: EP5 driftnet beacon. 3x with long dash. every 5 minutes

1903.0 kHz: 4OGR driftnet beacon. 3x with long dash. every 3 minutes

1930.0 kHz: RJ09 driftnet beacon, 3x with long dash. every 3 minutes

1945.0 kHz: ME1E driftnet beacon, 3x with long dash. every 3 minutes

1960.0 kHz: DX9 driftnet beacon, 3x with long dash. every 5 minutes  
1987.0 kHz: XS63 driftnet beacon, 3x with long dash. every 3 minutes  
1991.5 kHz: 4QEI driftnet beacon. 3x with long dash. every 3 minutes  
1993.0 kHz: JF23 driftnet beacon. 3x with long dash. every 3 minutes  
2110.0 kHz: JH1 driftnet beacon. 3x with long dash. every 5 minutes

28301.5 kHz: SP dash and ID each 1.5 mins.  
28301.5 kHz: BX dash and ID each 1.5 mins.  
28301.5 kHz: LC dash and ID each 1.5 mins.

**Pirate beacons:**

4079.6 kHz: TMP temperature beacon . - TMP 33 -, 33 deg F.  
3579.7 kHz: "de PIRATE BEACON" & dashes.

**Unid beacon:**

6815 kHz, 02-12, 0312 UTC: "X9Q X9Q" & 10sec tone & a gap of 35sec.

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**Unid 4600 kHz**

Unid logged by JPL via Global Tuners, Hong Kong.

4600 kHz, 12-12, 1401 UTC.

.... OK (1401z)  
NIL  
R R R DE F7T  
K K GA (1403z)  
SS VVV (1405z)  
.A4S 8  
T NIL  
VA (1407z)  
(Hand sent morse - weak signal - monitored until 1415z)

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**Unid 3753 kHz**

Unid logged by Attu.

3753 kHz, 11-12, 1905 UTC: DEJF transmitted from 1905 until 1915 UTC  
3753 kHz, 25-12, 1805 UTC: DEJF active each hour from 05-15 and 35-45 minutes past the hour  
3753 kHz, 31-12, 1735 UTC: DEJF transmits from hourly from 5-15 and 35-45 minutes

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## ***Intelligence profile Bulgaria***



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### ***BACKGROUND***

The Bulgars, a Central Asian Turkic tribe, merged with the local Slavic inhabitants in the late 7th century to form the first Bulgarian state. In succeeding centuries, Bulgaria struggled with the Byzantine Empire to assert its place in the Balkans, but by the end of the 14th century the country was overrun by the Ottoman Turks. Northern Bulgaria attained autonomy in 1878 and all of Bulgaria became independent from the Ottoman Empire in 1908. Having fought on the losing side in both World Wars, Bulgaria fell within the Soviet sphere of influence and became a People's Republic in 1946. Communist domination ended in 1990, when Bulgaria held its first multiparty election since World War II and began the contentious process of moving toward political democracy and a market economy while combating inflation, unemployment, corruption, and crime. The country joined NATO in 2004 and the EU in 2007.

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### ***GENERAL***

**Name:** Republika Balgariya (Balgariya) / Republic of Bulgaria (Bulgaria)  
**Capital:** Sofia  
**28 provinces:** Blagoevgrad, Burgas, Dobrich, Gabrovo, Khaskovo, Kurdzhali, Kyustendil, Lovech, Montana, Pazardzhik, Pernik, Plevan, Plovdiv, Razgrad, Ruse, Shumen, Silistra, Sliven, Smolyan, Sofiya (Sofia), Sofiya-Grad (Sofia City), Stara Zagora, Turgovishte, Varna, Veliko Turnovo, Vidin, Vratsa, Yambol

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### ***MILITARY***

Ground Forces (including Psy-Ops, Intelligence and Reconnaissance), Naval Forces Bulgarian Air Forces (Bulgarski Voenovazdyshni Sily)

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## ***INTELLIGENCE & SECURITY SERVICES***

Националната разузнавателна служба  
Nacionalna Razuznavatelna Sluzhba  
National Intelligence Service

Nacionalna Sluzhba Sigurnost  
Committee for State Security

Darzhavna Agencia za Nacionalna Sigurnost  
State Agency for National Security

Nacionalna Sluzhba za Okhrana  
National Protection Service

Military Intelligence



NIS HQ, Sofia

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### ***History of the Bulgarian foreign-intelligence***

The Bulgarian Foreign Intelligence was established on 23.05.1947 and functioned till the end of 1989 as a structure to the Ministry of Interior. The Committee for State Security (Komitet za Darzhavna Sigurnost) was a copy of the Soviet intelligence services and 7 Directorates:

- 1<sup>st</sup> Directorate: Foreign intelligence
- 2<sup>nd</sup> Directorate: Counter-intelligence
- 3<sup>rd</sup> Directorate: Military counter-intelligence
- 4<sup>th</sup> Directorate: Surveillance
- 5<sup>th</sup> Directorate: Government security and protection
- 6<sup>th</sup> Directorate: Political police
- 7<sup>th</sup> Directorate: Information

The MoD controlled the military intelligence of the General Staff.

With State Council Decree No.152/05.02.1990 was established the National Intelligence Service to work under the authority the State Council of the National Republic of Bulgaria. Under this Decree the state foreign intelligence was assigned to the newly established separate institution.

The Act on amending and supplementing the Republic of Bulgaria Defense and Armed Forces Act, promulgated – SG No.40/2002 and effective 19.04.2002, regulates the NIS status as a non-military unit and in the transitional and final provisions to this Act it is set that the service should implement the Republic of Bulgaria Defense and Armed Forces Act and the Regulations for the Regular Military Service until a separate legal act that sets its organization and activities is adopted. The authorities and obligations given to the NIS Director correspond to those of the Defense Minister according to the Republic of Bulgaria Defense and Armed Forces Act.

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### ***Nacionalna Razuznavatelna Sluzhba / National Intelligence Service***

NIS holds a key position within the system of institutions related to the national security of the Republic of Bulgaria.



Through its co-operation with the other national security services and the Armed Forces, the NIS ensures the national security and the sovereignty of the Republic of Bulgaria and provides the state government with impartial foreign and economic intelligence reports.

One of the main NIS priorities, carried out in close collaboration with the foreign intelligence services, is the fight against terrorism, radical fundamentalism, organized crime, drug traffic etc.

Besides, NIS organizes and ensures the physical and technical protection of its activities abroad; it has its own information data base available, and coordinates and performs its duties together with other institutions from the national security system.

NIS does not carry out intelligence activities within the territory of Bulgaria. The service acts only abroad. To fulfill its assigned duties NIS is authorized to use special intelligence means, applied only by the Ministry of Interior special services and after a judicial decision is issued.

The Service stores the collected and processed intelligence reports in information and archive records. Its users are the President, the Prime Minister, the Parliamentary Speaker, ministers, MPs and other state servants in compliance with the order and conditions defined by the Council of Ministers. NIS activities are in accordance with the National Security Concept adopted by the Parliament in 1998 as well as with other governmental legislative acts.

As early as May 2010 Bulgaria's Defense Minister proposed the merging of intelligence services to create a mega-structure of the CIA type which will unite the military and the foreign intelligence. Currently Bulgaria's military intelligence is controlled by the Defense Ministry while the National Intelligence Service is answerable to the President.

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#### *Nacionalna Sluzhba za Sigurnost / Committee for State Security*

The NSS is Bulgaria's national counter-intelligence service under the supervision of the Ministry of Interior.

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#### *Darzhavna Agencia za Nacionalna Sigurnost / State Agency for National Security*

DANS is a specialized body for Counterintelligence and Security, whose primary mission is to detect, prevent, intercept and neutralize threats to national security. The Agency was established to ensure non-interference in internal affairs of the Bulgarian state by external factors, to provide necessary information to higher bodies of state authority to conduct national security policy and decision making in accordance with national interests. The Agency continuously develops its capabilities as an integral part of the Bulgarian intelligence community, the national security of Bulgaria and the security system of the democratic community of Member States of EU and NATO.

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#### *Nacionalna Sluzhba za Okhrana / National Protection Service*

The NSO provides personal, office and technical security, specialized transportation and protection of the President, the National Assembly, Prime Minister, and other members of government and officials.

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#### *Military Intelligence / Military Police / Military Counterintelligence*

**The Military Information Service** functions as a military information service which is a legal entity supported by the budget - it is a secondary budget credit holder to the Minister of Defense;

military information service which acquires, processes, analyzes keeps and provides information in the interest of defense and the national security of the Republic of Bulgaria; this organizational structure of the service is approved by the Minister of Defense and its activities are defined by Regulations approved by the council of ministers.

**The Military Police and Military Counterintelligence Service** functions are as follows The basic tasks of "Security - military police and military counterintelligence" service is to maintain the order and security in the Ministry of Defense and in the Bulgarian army. Parallel to that it fulfills the following functions: it provides for the protection of the Ministry of Defense and the Bulgarian army from activities of foreign special services, organizations and persons directed against the security of the Ministry of Defense and the Bulgarian army; carries out activities aimed at maintaining the order in the Ministry of Defense and in the Bulgarian army for the prevention, revealing and investigation of crimes committed in the Ministry of Defense and in the Bulgarian army with view to finding out the perpetrators; provides guarding and security of activities, sites and persons in the Ministry of Defense and in the Bulgarian army; provides for the control over the observation of the rules for movement on the roads by the drivers of transport vehicles and organized groups of servicemen; conducts activities pertaining to collecting, processing, storage, analyzing, using and providing information related to the maintenance of order and security in the Ministry of Defense and in the Bulgarian army.

The structure of the "Security - military police and military counterintelligence" service is built on territorial principle in accordance with the administrative-territorial division of the Republic of Bulgaria and with the existing organizational and position structure of the Bulgarian army.

The Military Intelligence unites all the intelligence resources in the Armed Forces and is responsible for the timely acquisition, development and distribution of necessary intelligence information. The management of the military intelligence is realized in a single and centralized intelligence process. For this purpose capabilities are developed and maintained to secure the timely discovery and warning of risks and threats to national security and the intelligence support for formations in operations and missions.

The complex and dynamic security environment and the characteristics of present-day risks and threats requires tasks of a wider functional and territorial spectrum from the military intelligence service. Military aspects aside, it has to evaluate asymmetric risks and threats, terrorist activities, level of threat to our military forces, as well as the religious, psychological, cultural, historical and any other identity characteristics of the population in the security environment in which our Armed Forces are active.

The Bulgarian military intelligence is part of the NATO and EU intelligence community. Within, it carries out a constant exchange of information and participates in the intelligence support of operations and special activities of allied and coalition forces. It also establishes informational and operational cooperation with partner agencies, in the interest of national security and the defense of the state. The intelligence carried out within the Armed Forces of the Republic of Bulgaria is centralized, organized and executed at the strategic, operational and tactical levels.

At the strategic level, the intelligence is organized and exercised by the intelligence services of the Ministry of Defense, especially the "Military Information" service. These services support and develop capabilities for the acquisition of strategic intelligence by using human factors and technological means – by analyzing, predicting, developing and presenting intelligence to the political and military leadership, to the Bulgarian contingents in missions, to NATO, to the European Union and to partner agencies, for the timely warning of risks and threats to security, for operational planning and in the interest of the national defense policy.

At the operational level, intelligence is organized by the Joint Forces Command, with the participation of strategic-level intelligence services and the headquarters of the different military services. It is led by the intelligence formations from the three services of the Armed Forces. The main activity is directed to preparing and supporting human and technological intelligence resources, and the realization of intelligence support for operations.

At the tactical level, intelligence is organized by the commanders of companies and subdivisions, and is led by their subordinate reconnaissance/intelligence units/bodies, in the interest of their objectives and the task they are assigned to. To achieve these capabilities, the army maintains and supports formations of different types, and with different means of acquiring intelligence and leading electronic warfare in the battle area.

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## NUMBERS STATIONS

Related numbers stations – now all defunct:

E01 “Ready, ready”

S01 “Aida”

S02 “Drums and trumpets”

M17

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## SOURCES / RELATED INFORMATION

<http://www.mod.bg>

<http://www.nrs.bg>

<http://www.nso.bg>

<http://www.dans.bg>

<http://www.dksi.bg>

<http://www.mvr.bg>

<http://www.gdop.mvr.bg>

Wikipedia

CIA World Factbook

Nikolai Bozhilov “Reforming the Intelligence Services in Bulgaria”

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## LOGS SECTION

frequency	enigma	date	UTC	remarks	mode	day	contributor
583	M32	28-12-2011	0300	Russian Navy Kaliningrad "reo reo reo de rmp rmp qtc"	CW		(JRa)
2427	M01b	19-12-2011	2015	375 910 31 = 82229	CW		(FN)
2437	M01b	19-12-2011	1910	853 910 31 = 82229	CW		(FN)
2655	M01b	16-12-2011	2002	866 330 33 = 57816	CW		(FN)
2680	M22	2-12-2011	2026	4XZ Navy Haifa	CW		(WP3)
2706	M32	13-12-2011	2313	MUHX: Russian Mil. Ends 19-group message to unid ... –RP–O 042 RPT AL K. Recipient reads back msg on QSX freq 3229 kHz.	CW		(MPJ)
2738.5	M21	29-11-2011	1935	PVO	CW		(BCI)
2822	M32	15-12-2011	1911	WPNB: CIS Mil. comms checks with NPBE, YTPW and others.	CW		(MPJ)
3164	M32	15-12-2011	1914	KPXI: Russian Mil. "TAHN de KPXI QWZ NO QCZ K"	CW		(MPJ)
3192	M32	2-12-2011	1703	RMP: Russian navy Kaliningrad	CW		(WP3)

frequency	enigma	date	UTC	remarks	mode	day	contributor
3192	M32	11-12-2011	0318	Russian Navy Kaliningrad "REO REO DE RMP" into Russian navigational messages	CW		(PPA)
3192	S06	12-12-2011	1900	OM 349 349 349 00000 349 349 349 00000...	AM		(AIK)
3197	M01b	16-12-2011	2002	866 330 33 = 57816	CW		(FN)
3206	M01b	19-12-2011	2015	375 910 31 = 82229	CW		(FN)
3209	S06	19-11-2011	1930	OM 366 366 366 00000 366 366 366 00000...	AM		(AIK)
3297	M89	1-12-2011	1403	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	1-12-2011	1827	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	1-12-2011	2256	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	2-12-2011	1215	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	2-12-2011	1604	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	2-12-2011	1847	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	5-12-2011	1453	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	5-12-2011	2135	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	6-12-2011	1929	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	6-12-2011	2228	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	7-12-2011	1805	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	7-12-2011	2224	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	9-12-2011	1431	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	9-12-2011	2052	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	10-12-2011	1140	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	11-12-2011	1431	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	11-12-2011	1651	Msg in progress "BT UDUN" then to round V GKVZ (x3) DE Q7NW	CW		(JPL-HK)
3297	M89	11-12-2011	1845	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	12-12-2011	1330	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	12-12-2011	2105	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	13-12-2011	1259	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	13-12-2011	1714	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	13-12-2011	2143	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	14-12-2011	1344	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	14-12-2011	2016	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	22-12-2011	1344	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	22-12-2011	1641	(In traffic - see N&O 171) V GKVZ (x3) DE Q7NW (x2)	CW		(JPL-HK)
3297	M89	22-12-2011	2052	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	23-12-2011	1450	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	23-12-2011	1533	Sending 4 fig cut number msg "AR" V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	23-12-2011	1751	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	24-12-2011	1336	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	24-12-2011	1540	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	24-12-2011	2254	In 4 fig cut number tfc AR at 2256z V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	26-12-2011	2234	In tfc - 4 fig cut nr V GKVZ (x3) DE Q7NW (x2)	CW		(JPL-HK)
3297	M89	27-12-2011	2032	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	28-12-2011	1345	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	28-12-2011	1631	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	28-12-2011	1928	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	28-12-2011	2129	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	29-12-2011	1836	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	29-12-2011	2300	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	30-12-2011	1305	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	30-12-2011	1910	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	30-12-2011	1925	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)

frequency	enigma	date	UTC	remarks	mode	day	contributor
3297	M89	31-12-2011	1638	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	31-12-2011	1729	MSG NR 024 CK 301 46 01 01 0130 BT NTAN AR V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	31-12-2011	1917	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3297	M89	31-12-2011	2059	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW		(JPL-HK)
3322	M21	26-11-2011	1804	PVO	CW		(norave)
3322	M21	15-12-2011	1900	Russian Air Defence =992303??0?????	CW		(MPJ)
3323	S21	17-11-2011	1843	323...323 849 36...46422...24755...	USB		(AIK)
3338.5	M32	19-12-2011	2015	Russian Navy RJC66 wkg RFH80 Op-chat into encrypted morse msg.	CW		(Alf)
3397	M89	7-12-2011	1801	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3397	M89	27-12-2011	2301	V GKVZ GKVZ GKVZ DE Q7NW Q7NW	CW		(ALF)
3521	M01b	19-12-2011	1910	853 910 31 = 82229	CW		(FN)
3593.7	MX	26-11-2011	2236	Beacon "D"	CW		(norave)
3642	M89	1-12-2011	1823	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW		(JPL-HK)
3642	M89	6-12-2011	1925	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW		(JPL-HK)
3642	M89	7-12-2011	1758	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW		(JPL-HK)
3642	M89	13-12-2011	1718	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW		(JPL-HK)
3642	M89	23-12-2011	1750	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5320	CW		(JPL-HK)
3642	M89	24-12-2011	2252	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW		(JPL-HK)
3642	M89	28-12-2011	1917	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW		(JPL-HK)
3642	M89	29-12-2011	1818	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW		(JPL-HK)
3642	M89	29-12-2011	1818	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW		(JPL-HK)
3642	M89	29-12-2011	2255	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW		(JPL-HK)
3645	S06	6-12-2011	1800	OM 617 617 617 00000	AM		(AIK)
3658	MX	19-12-2011	1506	Beacon "V"	CW		(AGI)
3658	MX	19-12-2011	1829	Beacon "V"	CW		(GVN)
3658	MX	19-12-2011	1906	V: Khiva Beacon	CW		(MPJ)
3658	MX	19-12-2011	2229	Beacon "V"	CW		(AB)
3698	MC03	18-12-2011	1645	cut numbers, grid tracking	CW		(AtB)
3712.0	M42	13-12-2011	2100	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) germany
3712.0	M42	27-12-2011	2100	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) germany
3725	M89	18-12-2011	1658	witn witn witn de gnxg gnxg v	CW		(AtB)
3749	VC01	30-12-2011	1435	Chinese Robot in progress	USB		(Token)
3749	VC01	30-12-2011	1516	Chinese Robot in progress	USB		(AB-HK)
3753	---	25-12-2011	1805	DEJF active each hour from 05-15 and 35-45 minutes past the hour	CW		(AtB)
3753	---	31-12-2011	1735	DEJF transmits from hourly from 5-15 and 35-45 minutes	CW		(AtB) -
3755	M32	18-12-2011	1810	Russian Mil Magadan. cq cq cq de rts rts 4580 k	CW		(AtB)
3755	M32	25-12-2011	1800	Russian Mil: RTS wkg RBN3	CW		(AtB)
3756	S30	1-12-2011	0333	DlYa VTX3 AGDT ?U1B OSOG BO6TS F56SHCH 9GSA ZHBZU 4RVZ 3VS?	USB		(Tucana)
3756	S30	1-12-2011	1334	DlYa DMTS3 49FT TS2ZA LI27 INNTS SHCHGI?P 8TSSHCHI? TZLM FY5E F61N	USB		(Tucana)
3756	S30	1-12-2011	1842	DlYa F61H 37TSH MUDR 7BHSCH ZH7HZH YMA5 VTKH3 AGDT ?U1B OSOG	USB		(Tucana)
3756	S30	2-12-2011	0330	DlYa BO6S F56SHCH 9GSA ZHVZA 4RVZ 3VS? DK1?1 6I2ZH ZHD9V SI?5TS	USB		(Tucana)
3756	S30	2-12-2011	1334	DlYa DMTS3 49FT TS2ZA LI27 INNTS SHCHGI?P 8TSSHCHI? TZLM FY5E	USB		(Tucana)
3756	S30	2-12-2011	1842	DlYa F61H 37TSH MUDR 7BHSCH ZH7HZH YMA5 VTKH3 AGDT ?U1B OSOG	USB		(Tucana)
3756	S30	3-12-2011	0330	DlYa BO6S F56SHCH 9GSA ZHBZU 4RVZ 3VS? DK1?1	USB		(Tucana)

frequency	enigma	date	UTC	remarks	mode	day	contributor
				6I2ZH ZHD9V SI?5TS			
3756	S30	3-12-2011	1807	DlYa PYTSM Y8BM 8MUO TUZP 5I?7SHCH BLDKH 27SHCH? N1DU 53OB 78MV	USB		(Tucana)
3756	S30	4-12-2011	0248	DlYa A3PS ?MSV YGI?? 12SI 79AI? P?KSHCH 6EKHB ?UE8 TSP3? SHCHT3O	USB		(Tucana)
3756	S30	4-12-2011	1732	DlYa YMA5 VTKH3 AGDT ?U1B OSOG BO6TS F56SHCH 9GSA ZHVZA 4RVZ	USB		(Tucana)
3756	S30	5-12-2011	0302	DlYa 3VS? DKI?1 6I2ZH ZHD9V SI?5TS 62BV 81BR M7KS PMV5 L?GI?	USB		(Tucana)
3756	S30	6-12-2011	1419	DlYa P?KSHCH 6EKHB ?UE8 TSP3? SHCHT3O TSIKHS ZH1TR M1SE Z7PM ?O6P	USB		(Tucana)
3756	S30	7-12-2011	0314	DlYa 37TSH MUDR 7BHSCH ZH7HZH YMA5 VTKH3 AGDT ?U1B OSOG BO6TS	USB		(Tucana)
3756	S30	7-12-2011	1422	8S1Shch 41 914 ANTROINAYA Priyom	USB		(Avare)
3756	S30	7-12-2011	1423	8S1SHCH 41 914 ANTROINAYA 22 91 49 18	USB		(Tucana)
3756	S30	7-12-2011	1433	8S1Shch 58 725 SIKSTET 97 71 01 16 Priyom	USB		(Avare)
3756	S30	7-12-2011	1433	8S1SHCH 58 725 SIKSTET 97 71 01 16	USB		(Tucana)
3756	S30	7-12-2011	1737	DlYa V?Z? NLTSE 8?4O AU18 2ZSCHN V2MZ ZHSK4 SB7Z TAZ7 PYTSM	USB		(Tucana)
3756	S30	8-12-2011	0333	DlYa Y8VM 8MUO TUZP 5I?7SHCH VLDKH 27SHCH? N1DU 53OB 78MV A3PS	USB		(Tucana)
3756	S30	8-12-2011	1328	8S1SHCH 66 341 RUBCHATOST? 29 57 18 37	USB		(Tucana)
3756	S30	8-12-2011	1842	DlYa SHCHGI?P 8TSSHCHI? TZLM FY5E F61H 37TSH MUDR 7BHSCH ZH7HZH YMA5	USB		(Tucana)
3756	S30	9-12-2011	0401	DlYa VTX3 AGDT ?U1B OSOG BO6TS F56SHCH 9GSA ZHBZU 4RVZ 3VS?	USB		(Tucana)
3756	S30	9-12-2011	1337	DlYa VKY1 KHTSLF 61H ZBIL L7O6 V?Z? NLTSE 8?4O AU18 2ZSCHN	USB		(Tucana)
3756	S30	9-12-2011	1712	DlYa V2MZ ZHCK4 CB7Z TAZ7 PYTSM Y8BM 8MUO TUZP 5I?7SHCH BLDKH	USB		(Tucana)
3756	S30	10-12-2011	0232	DlYa 27SHCH? A3PS 53OB 78MV A3NS ?MSV YGI?? 12SI 79AI? P?KSHCH	USB		(Tucana)
3756	S30	10-12-2011	1451	DlYa DMTS3 49FT TS2ZA LI27 INNTS SHCHGI?P 8TSSHCHI? TZLM FY5E F61N	USB		(Tucana)
3756	S30	10-12-2011	1752	DlYa 37TSN MUDR 7VNSHCH ZH7NZH YMA5 VTKH3 AGDT ?U1B OSOG BO6S	USB		(Tucana)
3756	S30	11-12-2011	0408	DlYa F56SHCH 9GSA ZHBZU 4RVZ 3VS? DKI?1 6I2ZH ZHD9V SI?5TS 62BV	USB		(Tucana)
3756	S30	11-12-2011	1423	DlYa V?Z? NLTSE 8?4O AU18 2ZSCHN V2MZ ZHSK4 SB7Z TAZ7 PYTSM	USB		(Tucana)
3756	S30	11-12-2011	1736	DlYa Y8VM 8MUO TUZP 5I?7SHCH VLDKH 27SHCH? N1DU 53OB 78MV A3PS	USB		(Tucana)
3756	S30	12-12-2011	0235	DlYa ?MSV YGI?? 12SI 79AI? P?KSHCH 6EKHB ?UE8 TSP3? SHCHT3O TSIKHS	USB		(Tucana)
3756	S30	12-12-2011	1331	DlYa SHCHGI?P 8TSSHCHI? TZLM FY5E F61H 37TSH MUDR 7BHSCH ZH7HZH YMA5	USB		(Tucana)
3756	S30	12-12-2011	1753	DlYa AGDT ?U1B OSOG BO6TS F56SHCH 9GSA ZHBZU 4RVZ 3VS?	USB		(Tucana)
3756	S30	13-12-2011	0410	DlYa DKI?1 6I2ZH ZHD9V SI?5TS 62BV 81BR M7KS PMV5 L?GI? TSHCHSHCHS	USB		(Tucana)
3756	S30	13-12-2011	1911	DlYa N1DU 27SHCH? 53OB 78MV A3PS ?MSV YGI?? 12SI 79AI? P?KSHCH	USB		(Tucana)
3756	S30	14-12-2011	0245	DlYa 6EKHB ?UE8 TSP3? SHCHT3O TSIKHS ZH1TR M1SE Z7PM ?O6P I?KH?I?	USB		(Tucana)
3756	S30	14-12-2011	1527	DlYa FY5E F61H 37TSH MUDR 7BHSCH ZH7HZH YMA5 VTKH3 AGDT ?U1B	USB		(Tucana)
3756	S30	14-12-2011	1755	DlYa OSOG BO6S F56SHCH 9GSA ZHBZU 4RVZ 3VS? DKI?1 6I2ZH ZHD9V	USB		(Tucana)

frequency	enigma	date	UTC	remarks	mode	day	contributor
3756	S30	15-12-2011	0359	DIya SI?5TS 62BV 81BR M7KS PMV5 L?GI? TSHCHSHCHS VKY1 KHTSLF 61H	USB		(Tucana)
3756	S30	15-12-2011	1722	DIya 78MV A3PS ?MSV YGI?? 12SI 79AI? P?KHSCH 6EKHB ?UE8 TSP3?	USB		(Tucana)
3756	S30	16-12-2011	0307	DIya SHCHT3O TSIKHS ZH1TR M1SE Z7PM ?O6P I?KH?I? Z?1B NI9V DMTS3	USB		(Tucana)
3756	S30	16-12-2011	1417	DIya MUDR 7VNSHCH ZH7NZH YMA5 VTKH3 AGDT ?U1B OSOG BO6S F56SHCH	USB		(Tucana)
3756	S30	16-12-2011	1809	DIya 9GSA ZHBZU 4RVZ 3VS? DKI?1 6I2ZH ZHD9V SI?5TS 62BV 81BR	USB		(Tucana)
3756	S30	17-12-2011	0406	DIya M7KS PMV5 L?GI? TSHCHSHCHS VKY1 KHTSLF 61H ZBIL L7O5 V?Z?	USB		(Tucana)
3756	S30	17-12-2011	1615	DIya 8MUO TUZP SI?7SHCH BLDKH 27SHCH? N1DU 53OB 78MV A3PS ?MSV	USB		(Tucana)
3756	S30	17-12-2011	1813	DIya YGI?? 12SI 79AI? P?KHSCH 6EKHB ?UE8 TSP3? SHCHT3O TSIKHS ZH1TR	USB		(Tucana)
3756	S30	18-12-2011	1453	DIya YMA5 VTKH3 AGDT ?U1B OSOG BO6S F56SHCH 9GSA ZHBZU 4RVZ	USB		(Tucana)
3756	S30	18-12-2011	1844	DIya 3VS? DKI?1 6I2ZH ZHD9V SI?5TS 62BV 81BR M7KS PMV5 L?GI?	USB		(Tucana)
3756	S30	19-12-2011	0423	DIya TSHCHSHCHS VKY1 KHTSLF 61H ZBIL L7O5 V?Z? NLTSE 8?4O AUI8	USB		(Tucana)
3756	S30	20-12-2011	0305	DIya I?KH?I? Z?1B NI9V DMTS3 49FT TS2ZA LI27 INNTS SHCHGI?P 8TSSHCHI?	USB		(Tucana)
3756	S30	20-12-2011	1517	DIya ?U1B OSOG BO6TS F56SHCH 9GSA ZHVZA 4RVZ 3VS? DKI?1 6I2ZH	USB		(Tucana)
3756	S30	20-12-2011	1759	DIya ZHD9V SI?5TS 62BV 81BR M7KS PMV5 L?GI? TSHCHSHCHS VKY1 KHTSLF	USB		(Tucana)
3756	S30	21-12-2011	0400	DIya 61H ZBIL L7O5 V?Z? NLTSE 8?4O AUI8 2ZSHCHN V2MZ ZHCK4	USB		(Tucana)
3756	S30	21-12-2011	1926	DIya TSP3? SHCHT3O TSIKHS ZH1TR M1SE Z7PM ?O6P I?KH?I? Z?1B NI9V	USB		(Tucana)
3756	S30	22-12-2011	1801	DIya 81BR M7KS PMV5 L?GI? TSHCHSHCHS VKY1 KHTSLF 61KHZH ZBIL L7O5	USB		(Tucana)
3756	S30	23-12-2011	0423	DIya V?Z? NLTSE 8?4O AUI8 2ZSHCHN V2MZ ZHCK4 SB7Z TAZ7 PYTSM	USB		(Tucana)
3756	S30	23-12-2011	1428	DIya ?MSV YGI?? 12SI 79AI? P?KHSCH 6EKHB ?UE8 TSP3? SHCHT3O TSIKHS	USB		(Tucana)
3756	S30	23-12-2011	1739	DIya ZH1TR M1SE Z7PM ?O6P I?KH?I? Z?1B NI9V TS2ZA LI27 INNTS	USB		(Tucana)
3756	S30	24-12-2011	0335	DIya LI27 INNTS SHCHGI?P 8TSSHCHI? TZLM FY5E F61N 37TSN MUDR 7VNSHCH	USB		(Tucana)
3756	S30	24-12-2011	1410	DIya L?GI? TSHCHSHCHS VKY1 KHTSLF 61KHZH ZBIL L7O5 V?Z? NLTSE 8?4O	USB		(Tucana)
3756	S30	25-12-2011	0419	DIya AUI8 2ZSHCHN V2MZ ZHCK4 SB7Z TAZ7 PYTSM Y8VM 8MUO TUZP	USB		(Tucana)
3756	S30	25-12-2011	1645	DIya 79AI? P?KHSCH 6EKHB ?UE8 TSP3? SHCHT3O TSIKHS ZH1TR M1SE Z7PM	USB		(Tucana)
3756	S30	25-12-2011	1921	DIya ?O6P I?KH?I? Z?1B NI9V DMTS3 49FT TS2ZA LI27 INNTS SHCHGI?P	USB		(Tucana)
3756	S30	27-12-2011	0347	DIya 61KHZH ZBIL L7O5 V?Z? NLTSE 8?4O AUI8 2ZSHCHN V2MZ ZHCK4	USB		(Tucana)
3756	S30	28-12-2011	0355	DIya DMTS3 49FT TS2ZA LI27 INNTS SHCHGI?P 8TSSHCHI? TZLM FY5E F61N	USB		(Tucana)
3756	S30	28-12-2011	1454	DIya F56SHCH 9GSA ZHBZU 4RVZ 3VS? DKI?1 6I2ZH ZHD9V SI?5TS 62BV	USB		(Tucana)
3756	S30	28-12-2011	1748	DIya 81BR M7KS PMV5 L?GI? TSHCHSHCHS VKY1 KHTSLF 61KHZH ZBIL L7O5	USB		(Tucana)
3756	S30	29-12-2011	0348	DIya V?Z? NLTSE 8?4O AUI8 2ZSHCHN V2MZ ZHCK4	USB		(Tucana)



frequency	enigma	date	UTC	remarks	mode	day	contributor
				SB7Z TAZ7 PYTSM			
3756	S30	29-12-2011	1739	Dlya ZH1TR M1SE Z7PM ?O6P I?KH?I? Z?1B NI9V DMTS3 49FT TS2ZA	USB		(Tucana)
3756	S30	30-12-2011	0405	Dlya LI27 INNTS SHCHGI?P 8TSSHCHI? TZLM FY5E F61N 37TSN MUDR 7VNSHCH	USB		(Tucana)
3756	S30	30-12-2011	1709	Dlya 4RVZ 3VS? DK1?1 6I2ZH ZHD9V SI?5TS 62BV 81BR M7KS PMV5	USB		(Tucana)
3756	S30	31-12-2011	0440	Dlya L?GI? TSHCHSHCHS VKY1 KHTSLF 61KHZH ZBIL L7O5 V?Z? NLTSE 8?40	USB		(Tucana)
3797	M89	2-9-2011	0505	h2fl h2fl h2fl de drvz drvz v	CW		(IARUMS)
3797	M89	6-9-2011	0248	h2fl h2fl h2fl de drvz drvz v	CW		(IARUMS)
3797	M89	8-9-2011	0630	h2fl h2fl h2fl de drvz drvz v	CW		(IARUMS)
3797	M89	9-9-2011	0557	h2fl h2fl h2fl de drvz drvz v	CW		(IARUMS)
3797	M89	12-10-2011	2043	h2fl h2fl h2fl de drvz drvz v	CW		(IARUMS)
3797	M89	13-10-2011	2156	h2fl h2fl h2fl de drvz drvz v	CW		(IARUMS)
3797	M89	17-10-2011	2023	h2fl h2fl h2fl de drvz drvz v	CW		(IARUMS)
3797	M89	18-10-2011	0602	h2fl h2fl h2fl de drvz drvz v	CW		(IARUMS)
3797	M89	29-10-2011	2033	h2fl h2fl h2fl de drvz drvz v	CW		(IARUMS)
3797	M89	30-10-2011	2053	h2fl h2fl h2fl de drvz drvz v	CW		(IARUMS)
3797	M89	31-10-2011	2043	h2fl h2fl h2fl de drvz drvz v	CW		(IARUMS)
3797	M89	1-12-2011	1402	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW		(JPL-HK)
3797	M89	1-12-2011	1825	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW		(JPL-HK)
3797	M89	1-12-2011	1937	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW		(JPL-HK)
3797	M89	2-12-2011	1214	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW		(JPL-HK)
3797	M89	2-12-2011	1603	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW		(JPL-HK)
3797	M89	2-12-2011	1850	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW		(JPL-HK)
3797	M89	9-12-2011	1429	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	9-12-2011	2050	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	10-12-2011	1127	4 fig cut nr until 1134z AR V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	11-12-2011	1133	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	11-12-2011	1650	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	11-12-2011	1758	hf2l hf2l hf2l de drv8 drv8 v	CW		(AtB)
3797	M89	11-12-2011	1848	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	12-12-2011	1333	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	13-12-2011	1247	In 4 fig cut nrs until 1257z V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-SVK)
3797	M89	13-12-2011	1711	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	13-12-2011	2145	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	14-12-2011	1339	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	14-12-2011	2014	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	22-12-2011	1349	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	22-12-2011	2058	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	23-12-2011	1452	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	23-12-2011	1752	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	23-12-2011	2117	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW		(JPL-HK)
3797	M89	24-12-2011	1341	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	24-12-2011	2253	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW		(JPL-HK)
3797	M89	26-12-2011	2227	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	28-12-2011	1319	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	28-12-2011	1635	In 4 fig cut nr tfc AR V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	28-12-2011	1918	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	29-12-2011	1825	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3797	M89	29-12-2011	2257	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)

frequency	enigma	date	UTC	remarks	mode	day	contributor
3797	M89	31-12-2011	1640	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW		(JPL-HK)
3803	M18	13-12-2011	1949	2349 2349 2349 2350...	CW		(FN)
3803	M18	16-12-2011	2311	0416 0416 0417 etc UTC+5, 5 minutes late	CW		(AB)
3803	M18	18-12-2011	1655	Russian Mil. Time marker transmitting utc time +4 hours in morse	CW		(PPA)
3803	M18	22-12-2011	0354	Russian Mil: time string 1957, off by 12 hours local Moscow time	CW		(PPA)
3803.1	M18	14-12-2011	2319	"0318 0318 ... 0318 0319 ..."; UTC+4hrs, but 1 minute too early.	CW		(ALF)
3803.1	M18	19-12-2011	1905	Russian Clock "2305", UTC+4.	CW		(MPJ)
3803.1	M18	20-12-2011	1938	Russian Mil. Time marker "0043 0043 0043 ... 0044" UTC +5:05 hrs	CW		(Alf)
3804	M18	16-12-2011	1857	0002 0002 0002 0002 0003 0003...	CW		(Danix)
3807	M89	26-12-2011	1745	h2fl h2fl h2fl de drv8 drv8 v	CW		(AtB)
3823	S21	1-12-2011	1852	323 30 ... 50392 63477 72118 87517 58443 71753 28385 24349 323 30 000	USB		(AB)
3826	M32	18-12-2011	2120	MNGM: Russian/CIS/(Ukraine?) mil net. Signal check with at least 6G6C, PEFJ, LSSI, OMHN, PNKR, KKOD, DZZT.	CW		(TJ)
3828	S32	7-12-2011	1426	Al'fa-45 27 348 OSTRYJ 13 00 33 19 Priyom)	USB		(Avare)
3828	S32	7-12-2011	1437	Al'fa-45 43 384 ASTROLYABIYA 32 26 56 43 Priyom)	USB		(Avare)
3828.9	S32	30-11-2011	2317	Squeaky Wheel	USB		(TJ)
3838	E11	9-12-2011	1855	262/00 out	USB		(Danix)
3838	E11a	16-12-2011	1856	269/32...	USB		(Danix)
3838	S06	1-12-2011	1805	349 349 349 00000	AM		(AB)
3838	S06	5-12-2011	1805	349 349 349 00000	AM		(AB)
3838	S06	5-12-2011	1905	OM 349 349 349 00000	AM		(AIK)
3838	S06	19-12-2011	1905	349 349 349 00000	AM		(FN)
3842	E06	14-12-2011	1951	OM/EE "123456789"	AM		(linkz)
3842	E06	14-12-2011	2020	829 829 829 00000	AM		(linkz)
3842	S06	17-12-2011	1936	OM/RR "366 366 366 00000"	USB		(Alf)
3845	S06	17-12-2011	1935	366 366 366 00000	AM		(AIK)
3854	G06	5-12-2011	1700	YL 439 439 439 00000 repeated 43123456789 43123456789 43123456789 ...	AM		(AIK)
4012	M12	28-12-2011	2240	350 1 740 95, 25 wpm	CW		(Danix)
4015.0	M42	13-12-2011	2220	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) germany
4016.0	M42	27-12-2011	2220	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) germany
4025	M45	1-12-2011	1802	525 ...	CW		(AB)
4028.0	M42	7-12-2011	2000	Russian Gov/Intel.	Baudot 200Bd/500 Hz	Wed	(FMB) germany
4035	V02a	19-12-2011	0400	xxxxx 82671 xxxxx in progress, missed callup.	AM		(Jon-FL)
4036	E06	14-12-2011	1920	829 829 829 00000	AM		(FN)
4079	M32	2-12-2011	1655	RMP: Russian navy Kaliningrad	CW		(WP3)
4181	MC03	18-12-2011	1808	parallel frequency to 3698 khz, cut numbers grid tracking	CW		(AtB)
4181	MC03	24-12-2011	1620	cut number grid tracking	CW		(AtB)
4225	M89	2-12-2011	1600	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	2-12-2011	1852	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	5-12-2011	1447	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	5-12-2011	2137	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	6-12-2011	1921	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	6-12-2011	2225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	7-12-2011	1459	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	9-12-2011	2046	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)

frequency	enigma	date	UTC	remarks	mode	day	contributor
4225	M89	10-12-2011	1126	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	10-12-2011	1437	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	11-12-2011	1426	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	11-12-2011	1647	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	11-12-2011	1844	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	12-12-2011	1327	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	12-12-2011	1418	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	12-12-2011	2059	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	13-12-2011	1243	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	13-12-2011	1727	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	13-12-2011	2147	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	14-12-2011	1346	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	14-12-2011	2017	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	22-12-2011	1331	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5555	CW		(JPL-HK)
4225	M89	23-12-2011	1448	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	23-12-2011	1748	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	24-12-2011	1333	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	25-12-2011	1838	7npe 7npe 7npe de qv5b qv5b v	CW		(AtB)
4225	M89	26-12-2011	2229	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	27-12-2011	2027	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	28-12-2011	1335	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	28-12-2011	1916	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	28-12-2011	2150	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	29-12-2011	1817	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	29-12-2011	2301	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	30-12-2011	1310	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	30-12-2011	1904	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4225	M89	31-12-2011	1634	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW		(JPL-HK)
4331	M22	6-12-2011	2306	4XZ: Israeli Navy Haifa "vvv de 4xz 4xz" tfc msg nr 881 gr16 5L	CW		(SW2)
4376.5	M32	20-12-2011	1824	RBC89: Russian navy ship "RBC89 QTC 63 5 19 21 2201 63" into 5F msg ending "RBC89 QRU"	CW		(PPA)
4439	XPA2	22-12-2011	2030	06160 00001 00000	MFSK		(AIK)
4441	E11	19-11-2011	1444	YL 267/00 267 OBLIQUE 00 267 OBLIQUE 00...	USB		(AIK)
4441	E11	17-12-2011	1444	87/00	USB		(Danix)
4441	E11	17-12-2011	1445	YL 267 OBLIQUE 00 267 OBLIQUE 00...	USB		(AIK)
4441	E11	24-12-2011	1445	YL very weak	USB		(AIK)
4441	E11	29-12-2011	0900	248/00	USB		(AB)
4441	E11a	31-12-2011	0900	248/00	USB		(HS2)
4441	G11	11-11-2011	1959	266/98 266 STRICH 98 266 STRICH 98... AUCHTUNG 96442 96442 97119... LG 22681	USB		(AIK)
4441	G11	20-11-2011	2000	YL 262/00 262 STRICH 00 262 STRICH 00...	USB		(AIK)
4441	G11	2-12-2011	2000	262/31	USB		(AB)
4441	G11	16-12-2011	2000	262/00	USB		(FN)
4441	S11a	4-12-2011	1355	245/00 ??? 254/00???	USB		(AB)
4443	M12	13-12-2011	0440	408 408 408 1 into 5F message	CW		(PPA)
4443	M12	20-12-2011	0440	408 000	CW		(Danix)
4443	M12	22-12-2011	0440	408 000	CW		(Danix)
4443	M12	27-12-2011	0440	408 1 548 189, 25 wpm	CW		(Danix)
4474	M89	11-12-2011	1445	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW		(JPL-SVK)
4474	M89	11-12-2011	1850	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW		(JPL-HK)
4474	M89	12-12-2011	2054	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW		(JPL-SVK)
4474	M89	13-12-2011	2021	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW		(JPL-SVK)
4474	M89	23-12-2011	1753	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW		(JPL-HK)
4474	M89	24-12-2011	1725	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW		(JPL-SVK)

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4474	M89	26-12-2011	2256	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW		(JPL-SVK)
4474	M89	27-12-2011	1508	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW		(JPL-SVK)
4474	M89	28-12-2011	1914	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW		(JPL-SVK)
4474	M89	30-12-2011	1906	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW		(JPL-HK)
4474	M89	31-12-2011	1726	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW		(JPL-HK)
4483	E07	8-12-2011	2150	OM 774 744 744 1... 582 47 582 47 59126 43616 40527 35893 68306 42931 66599 32719 92882 10398 93811 .....	AM		(AIK)
4483	E07	22-12-2011	2150	774 774 774 1 238 48 21334 82740 85131 ....	AM		(AIK)
4490	M01	15-11-2011	2000	Unreadable	CW		(AIK)
4490	M01	13-12-2011	2013	197	CW		(ATCManch)
4490	M01	20-12-2011	2000	197 211 30 = 78066	CW		(FN)
4512	M12	28-12-2011	2220	350 1 740 95, 25 wpm	CW		(Danix)
4512	M89	5-12-2011	2138	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW		(JPL-HK)
4512	M89	6-12-2011	1927	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	6-12-2011	2227	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	7-12-2011	1801	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	7-12-2011	2143	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW		(JPL-HK)
4512	M89	9-12-2011	1429	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	9-12-2011	2050	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	10-12-2011	1127	4 fig cut nr until 1134z AR V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	11-12-2011	1133	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	11-12-2011	1650	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	11-12-2011	1848	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	11-12-2011	1927	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	12-12-2011	1333	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	12-12-2011	2103	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW		(JPL-HK)
4512	M89	13-12-2011	1247	In 4 fig cut nrs until 1257z V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	13-12-2011	1711	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	13-12-2011	2145	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	14-12-2011	1339	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	14-12-2011	2014	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	22-12-2011	1349	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	22-12-2011	2058	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	23-12-2011	1452	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	23-12-2011	1752	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	24-12-2011	1341	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	26-12-2011	2227	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	27-12-2011	2240	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW		(JPL-HK)
4512	M89	28-12-2011	1319	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	28-12-2011	1635	In 4 fig cut nr tfc AR V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	28-12-2011	1918	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	29-12-2011	1825	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	29-12-2011	2257	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4512	M89	30-12-2011	1908	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW		(JPL-HK)
4512	M89	31-12-2011	1640	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW		(JPL-HK)
4516	E06	10-12-2011	0230	759 862 31	AM		(Spectre)
4516	E06	11-12-2011	0230	759 862 31	AM		(Spectre)
4516	E06	17-12-2011	0230	759 126 34	AM		(Spectre)
4516	E06	18-12-2011	0230	759 126 34	AM		(Spectre)
4516	E06	24-12-2011	0230	759 308 42	AM		(Spectre)
4516	E06	25-12-2011	0230	759 308 42	AM		(Spectre)

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4516	E06	31-12-2011	0230	759 180 32	AM		(Spectre)
4516	E06	31-12-2011	0230	occasional numbers audible under a very strong CEDAR station.	AM		(westt1us)
4516	E06	1-1-2012	0230	759 180 32	AM		(Spectre)
4516.0	E06	25-12-2011	0230	Russian Man	USB	Sun	(Saber)
4532	M89	26-12-2011	1842	h2fl h2fl h2fl de drv8 drv8 v. DRV8 has abandoned 4512 kHz	CW		(AtB)
4532	M89	26-12-2011	1930	DRV8: lengthy msg	CW		(AtB)
4536	XPA2	10-11-2011	2110	6166 1 00144	MFSK		(AIK)
4536	XPA2	15-11-2011	2110	06160 00001 00000 10140	MFSK		(AIK)
4536	XPA2	22-11-2011	2110	9977 165 71880 4333 34466772188 16688 3007 1773 44911 7422 0112	MFSK		(AIK)
4536	XPA2	29-11-2011	2110	05948 00001 00000 10140	MFSK		(AIK)
4557.7	MX	8-12-2011	2146	Beacon "D" : Rus Navy Sevastopol UKR 2146 CW channel marker 2011-12-08 (wp3)	CW		(WP3)
4557.9	MX	26-11-2011	2234	Beacon "S"	CW		(norave)
4557.9	MX	8-12-2011	2146	Beacon "S: Rus Navy Severomorsk RUS 2146 CW channel marker 2011-12-08 (wp3)	CW		(WP3)
4564	E07	2-11-2011	2140	815 815 815 1 62128 (6x) 124 69 124 69 64125 70735 04391 65921	AM		(AIK)
4564	E07a	16-11-2011	2140	IF E07A Txs null MSGS	AM		(AIK)
4564	E07a	7-12-2011	2140	815 1 62128 124 69	AM		(Spectre)
4567	XPA	22-11-2011	1440	691 691 691 000...6 09974 00001 00000 10140	MFSK		(AIK)
4569	M42	27-12-2011	0548	Russian Gov/Intel.	FSK 200/1000		(Danix)
4587	G06	5-12-2011	1800	YL 539 539 539 00000	AM		(AIK)
4595.0	M42	27-12-2011	2110	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) germany
4600	V24	12-9-2011	1530	YL KK 4f	AM		(Token)
4600	V24	24-11-2011	1530	YL KK 5f	AM		(Token)
4600	V24	25-11-2011	1530	YL KK 5f	AM		(Token)
4600	V24	24-12-2011	1530	YL KK 4f	AM		(Token)
4600	V24	25-12-2011	1530	YL KK 4f	AM		(Token)
4619.0	M42	13-12-2011	2210	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) germany
4619.0	M42	27-12-2011	2210	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) germany
4625	S28	2-12-2011	0727	Short conversation	USB		(AB-EST)
4625	S28	7-12-2011	1248	Three messages in one broadcast	USB		(ATCManch)
4625	S28	7-12-2011	1422	MDZhB 42 651 METROKIN 32 52 15 40	USB		(JM5)
4625	S28	7-12-2011	1435	MDZhB 78 257 TsETRARIY 96 53 87 58	USB		(JM5)
4625	S28	7-12-2011	1437	MDZhB 69 239 VETOKha 16 33 99 32	USB		(JM5)
4625	S28	11-12-2011	1252	MDZhB 65 940 Petelshchik 36 11 60 21	USB		(JM5)
4625	S28	11-12-2011	1256	MDZhB 30 363 Netverdij 20 88 37 70	USB		(JM5)
4625	S28	13-12-2011	0811	MDZhB 16 994 FYeSTUKA 36 72 98 43	USB		(AB-EST)
4625	S28	14-12-2011	0740	MDZhB 44 833 BYeSSChYeTNYJ 68 25 93 41	USB		(AB-EST)
4625	S28	17-12-2011	0431	MDZhB 81 176 BYeSSOYuZNYJ 18 89 23 12	USB		(AB-EST)
4625	S28	28-12-2011	1527	MDZhB 97 416 Metropotat 40 77 29 21	USB		(AB-EST)
4625	S28	28-12-2011	1527	MDZhB 97 416 Metropotat 40 77 29 21	USB		(JM5)
4625	S28	29-12-2011	1302	MDZhB 71 567 TERRAKOTA 29 53 56 23	USB		(AB-EST)
4625	S28	29-12-2011	1302	MDZhB 71 567 TERRAKOTA 29 53 56 23	USB		(JM5)
4626	S28	20-12-2011	2147	Buzzer	USB		(ML4)
4636	XPA2	8-11-2011	2050	06160 00001 00000 10140	MFSK		(AIK)
4636	XPA2	10-11-2011	2050	msg	MFSK		(AIK)
4636	XPA2	15-11-2011	2050	06160 00001 00000 10140	MFSK		(AIK)
4636	XPA2	22-11-2011	2050	977 116577168 43332 0441 72488 16608 7707501173 00791 994266	MFSK		(AIK)

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4636	XPA2	29-11-2011	2050	05948 00001 00000 10140	MFSK		(AIK)
4639	XPA2	22-12-2011	2050	61661 00000 10144	MFSK		(AIK)
4639.0	xpa	8-12-2011	2052	(i.p.)	USB	Thu	(FMB) germany
4667	S28	13-12-2011	2036	parasitic transmission	USB		(ATCManch)
4709	S28	13-12-2011	2040	Parasitic transmission	USB		(ATCManch)
4792	G06	11-11-2011	1929	436/155 155 15 15 53879... 15378... 35068... 36789... 04758... LG 155 15 15	AM		(AIK)
4792	G06	9-12-2011	1929	436 696 15... (message was completely incomprehensible due to so varying modulation)	AM		(Danix)
4828	M03	4-12-2011	0820	761/00	CW		(AB)
4828	M03	4-12-2011	1320	438/....	CW		(AB)
4836	E06	1-12-2011	2030	321 486 15	AM		(Spectre)
4836	E06	15-12-2011	2030	321 486 15	AM		(Spectre)
4836	MC03	18-12-2011	1458	Chinese air defence cut number string + local time 1D5D5T5N UU57 (UTC+8)	CW		(PPA)
4850	M42	1-12-2011	0430	RBI: Russian Gov/Intel clg RII2 for signal check	CW		(TJ)
4850	M42	6-12-2011	0500	Russian Gov/Intel. Radio checks with RJW2 and RII2,into RTTY to RJW2 and RII2	Baudot 1,5 stb/50/500R + CW		(PPA)
4855	M32	11-12-2011	1918	Russian Mil?: RCY70	CW		(AtB)
4860	M89	1-12-2011	1420	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Thu) //6840	CW		(JPL-HK)
4860	M89	1-12-2011	1823	VVV (x3) Q2M DE NYZ (x2) QSA ? K (In Progress) (Thu) //6840	CW		(JPL-HK)
4860	M89	2-12-2011	1220	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Fri) //6840	CW		(JPL-HK)
4860	M89	6-12-2011	0020	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Tue) //6840	CW		(JPL-HK)
4860	M89	6-12-2011	1922	VVV (x3) Q2M DE NYZ (x2) QSA ? K (In Progress) (Tue) //6840	CW		(JPL-HK)
4860	M89	7-12-2011	1820	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Wed) //6840	CW		(JPL-HK)
4860	M89	9-12-2011	2120	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Fri) //6840	CW		(JPL-HK)
4860	M89	10-12-2011	1120	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Sat) //6840	CW		(JPL-HK)
4860	M89	11-12-2011	1420	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Sun) //6840	CW		(JPL-HK)
4860	M89	11-12-2011	1921	VVV (x3) Q2M DE NYZ (x2) QSA ? K (In progress - Stopped suddenly) (Sun) //6840	CW		(JPL-HK)
4860	M89	12-12-2011	1323	VVV (x3) Q2M DE NYZ (x2) QSA ? K (In progress) (Mon) //6840	CW		(JPL-HK)
4860	M89	12-12-2011	2120	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Mon) //6840	CW		(JPL-HK)
4860	M89	13-12-2011	1720	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Tue) //6840	CW		(JPL-HK)
4860	M89	20-12-2011	1921	VVV Q2M Q2M Q2M DE NYZ NYZ	CW		(PPA)
4860	M89	23-12-2011	2120	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5)	CW		(JPL-HK)
4860	M89	24-12-2011	1420	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Sat) //6840	CW		(JPL-HK)
4860	M89	24-12-2011	1720	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Sat) //6840	CW		(JPL-SVK)
4860	M89	26-12-2011	2223	VVV (x3) Q2M DE NYZ (x2) QSA ? K	CW		(JPL-HK)
4860	M89	28-12-2011	1320	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Wed) //6840	CW		(JPL-HK)
4860	M89	28-12-2011	1920	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Wed) //6840	CW		(JPL-HK)

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4860	M89	29-12-2011	1820	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Thu) //6840	CW		(JPL-HK)
4860	M89	30-12-2011	1320	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Fri) //6840	CW		(JPL-HK)
4860	M89	30-12-2011	1920	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Fri) //6840	CW		(JPL-HK)
4860	M89	31-12-2011	1720	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Sat) //6840	CW		(JPL-HK)
4860.0	S06	3-12-2011	2030	(i.p.)	USB	Sat	(FMB) ger- many
4865.5	M21	8-12-2011	2157	Russian Air Defense =99t157??8????? =99t158??8????? =99t159??8?????	CW		(WP3)
4900	V24	11-4-2011	1500	YL KK 5f	AM		(Token)
4900	V24	12-4-2011	1500	YL KK 5f	AM		(Token)
4900	V24	16-12-2011	1500	YL KK 5f	AM		(Token)
4900	V24	17-12-2011	1500	YL KK 5f	AM		(Token)
4900	V24	18-12-2011	1530	YL KK 5f	AM		(Token)
4909	E11	20-12-2011	2000	757/00000/00 "out"	USB		(FN)
4951	M21	18-12-2011	2025	Russian Air Defence =990028?0?????	CW		(MPJ)
4951.5	M21	8-12-2011	2205	Russian Air Defense =99t2t7??t????? =99t2t8??t?????	CW		(WP3)
4951.5	M21	18-12-2011	2328	Russian Air Defense =990331??0????? =990332??0?????	CW		(WP3)
4951.5	M21	20-12-2011	1431	Russian Air Defence =991831??0?????	CW		(MPJ)
4951.5	M21	21-12-2011	1735	Russian air defence =992139??t?????	CW		(PPA)
4961	MX	18-12-2011	2332	Beacon "V"	CW		(WP3)
4961	MX	19-12-2011	2128	V: Khiva Beacon Not // 3658 kHz.	CW		(MPJ)
4961	MX	19-12-2011	2229	Beacon "V"	CW		(AB)
4961	MX	20-12-2011	1919	Beacon "V"	CW		(PPA)
4990	M21	10-12-2011	1930	Grid tracking	CW		(AtB)
4990	MC03	24-12-2011	1645	cut number grid tracking; parallel frequency to 4181 khz	CW		(AtB)
5010	M31	30-11-2011	0651	FDI22 - Narbonne. "VVV VVV VVV DE FDI22 FDI22 FDI22 AR"	CW		(AnEur)
5043	M12	22-12-2011	0500	408 000	CW		(Danix)
5043	M12	27-12-2011	0500	408 1 548 189, 25 wpm	CW		(Danix)
5043	M12	29-12-2011	0500	408 000	CW		(Danix)
5070	S06s	15-11-2011	1500	YL 537	USB		(AIK)
5077.5	M31	24-12-2011	1421	FAF Calorie station, marker tape "ceci est une emission de..."	USB		(linkz)
5078	M32	24-12-2011	0512	YM9C: Russian military duplex radio checks with a.o. 9C5X, XFXZ, 5TTK	CW		(PPA)
5080	M42	1-12-2011	0806	Russian Gov/Intel. Possibly RLB23	F1B 50/500		(TJ)
5082	E11	1-12-2011	1730	416/00	USB		(AB)
5082	E11	8-12-2011	1730	YL 416/00	USB		(AIK)
5082	E11a	22-12-2011	1730	418/31 A 47975 31112 .... 02207 OUT	USB		(HS2)
5115	V24	12-2-2011	1530	YL KK 5f	AM		(Token)
5115	V24	12-3-2011	1530	YL KK 5f	AM		(Token)
5115	V24	11-5-2011	1400	YL KK 5f	AM		(Token)
5115	V24	11-6-2011	1400	YL KK 5f	AM		(Token)
5115	V24	12-10-2011	1630	YL KK 4f	AM		(Token)
5115	V24	12-11-2011	1630	YL KK 4f	AM		(Token)
5115	V24	20-11-2011	1500	YL KK 5f	AM		(Token)
5115	V24	17-12-2011	1530	YL KK 5f	AM		(Token)
5115	V24	18-12-2011	1530	YL KK 5f	AM		(Token)
5115	V24	23-12-2011	1630	YL KK 4f	AM		(Token)

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5115	V24	31-12-2011	1500	YL KK 5f	AM		(Token)
5133.0	M42	3-12-2011	2030	Russian Gov/Intel.	Baudot 200Bd/500 Hz	Sat	(FMB) ger- many
5141.0	M42	13-12-2011	1710	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) ger- many
5141.0	M42	27-12-2011	1710	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) ger- many
5146	E07a	8-12-2011	0530	188 1 62128 124 69 64125 70735 04391 65921 90107 ... 53799 000 000	USB		(Danix)
5153.7	MX	30-12-2011	2230	Beacon "D"	CW		(SW2)
5153.9	MX	8-12-2011	2133	Beacon "S: Rus Navy Severomorsk RUS 2133 CW channel marker 2011-12-08 (wp3)	CW		(WP3)
5154	MX	8-12-2011	2133	Beacon "C: Rus Navy Moscow RUS 2133 CW chan- nel marker 2011-12-08 (wp3)	CW		(WP3)
5156.8	MX	8-12-2011	2133	Beacon "L: Rus Navy RUS 2133 CW channel marker 2011-12-08 (wp3)	CW		(WP3)
5156.8	MX	13-12-2011	0323	Beacon "L" St.Petersburg	CW		(PPA)
5156.8	MX	17-12-2011	1511	Beacon "L" Sankt Peterburg	CW		(MPJ)
5164	E07	2-11-2011	2120	815 815 815 1 62128 (6x) 124 69 124 69 64125 70735 04391 65921	AM		(AIK)
5164	E07a	16-11-2011	2120	OM 815 815 815 000...	AM		(AIK)
5164	E07a	7-12-2011	2120	815 1 62128 124 69	AM		(Spectre)
5171	M32	10-12-2011	1933	Russian Mil? R3NW wkg YR1K 5fg msg	CW		(AtB)
5171	M32	11-12-2011	1935	Russian Mil?: R3NW 5fg msg, garbled cw using hand key	CW		(AtB)
5230	M89	4-12-2011	2313	3A7D: Chinese Military V-mkr to DKG6.	CW		(ALF)
5230	M89	11-12-2011	1429	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW		(JPL-HK)
5230	M89	11-12-2011	1439	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW		(JPL-SVK)
5230	M89	11-12-2011	1847	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW		(JPL-HK)
5230	M89	12-12-2011	2101	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW		(JPL-HK)
5230	M89	23-12-2011	1750	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW		(JPL-HK)
5230	M89	26-12-2011	2233	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW		(JPL-HK)
5230	M89	27-12-2011	2241	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW		(JPL-HK)
5230	M89	28-12-2011	1634	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW		(JPL-HK)
5230	M89	28-12-2011	1917	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW		(JPL-HK)
5230	M89	29-12-2011	1818	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW		(JPL-HK)
5230	M89	29-12-2011	1818	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW		(JPL-HK)
5230	M89	29-12-2011	2255	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW		(JPL-HK)
5230	M89	31-12-2011	1636	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW		(JPL-HK)
5240.0	xpa	13-12-2011	2111	(i.p.)	USB	Tue	(FMB) ger- many
5250	S06s	13-12-2011	0700	374 265 8 46062 68672 97478 39685 30485 96632 52537 53317 265 8 00000	AM		(AB)
5278	E07	12-12-2011	2040	OM 472 472 472 1 472 472 472 1... 577 20 577 20 20492 11032 .....	AM		(AIK)
5278	M89	19-12-2011	0000	v gkvz gkvz gkvz de q7nw q7nw	CW		(WP3)
5312	M12	28-12-2011	2200	350 1 740 95, 25 wpm	CW		(Danix)
5320	M01	8-12-2011	1800	Msg	CW		(AIK)
5320	M01a	29-12-2011	1430	679 679 679 311 17 I think. Followed by 111 111 and 999 then a pause and several 5fGs that I couldn't hear right. It ended with 111 000. Weak and fading signal.	CW		(AB)
5320	S06s	29-12-2011	1400	624 624 624 00000	USB		(AB)
5325	M42	1-12-2011	0540	RND79: Russian Gov. "rbw rbw rbw de rnd79 rnd79"	RUS-ARQ		(TJ)
5328	VC01	1-12-2011	1204	Chinese Robot in progress	USB		(AB-HK)
5328	VC01	1-12-2011	1833	Chinese Robot in progress	USB		(AB-HK)



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5328	VC01	2-12-2011	1540	Chinese Robot in progress	USB		(AB-HK)
5328	VC01	4-12-2011	1401	Chinese Robot in progress	USB		(AB-HK)
5336	XPA2	8-11-2011	2030	06160 00001 00000 10140	MFSK		(AIK)
5336	XPA2	10-11-2011	2030	6166 1 11144	MFSK		(AIK)
5336	XPA2	15-11-2011	2030	06160 00001 00000 10140	MFSK		(AIK)
5336	XPA2	22-11-2011	2030	988 00166 71680 44132 04416 72418 12608 47075 01773 04791 97426 70182 91419 24956 50692	MFSK		(AIK)
5336	XPA2	29-11-2011	2030	05948 00001 00000 10140	MFSK		(AIK)
5342.5	M32	26-12-2011	0519	CIS/Russian Mil: "V2XU V2XU V2XU de OV6M OV6M QLW QSA? QXS = V2XU V2XU V2XU de OV6M OV6M QLW QSA? QXS +" later radio checks with KAEJ etc.	CW		(ALF)
5347.0	M42	19-12-2011	1650	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Mon	(FMB) ger- many
5352.9	M32	26-12-2011	0535	CIS/Russian Mil: WZTP radio checks with 1XFA, NFCL, MHD3, JZXL, A4VI etc.	CW		(ALF)
5358	M03	15-11-2011	1755	798/00 798/00 798/00 = = 000	CW		(AIK)
5358	M03	3-12-2011	1535	798/00 "VVV" at 1527 UTC	CW		(AB)
5375	MC03	3-12-2011	2327	Chinese Air Defense cut number strings and local time T7U7 (UTC+8)	CW		(PPA)
5380.0	M14	27-12-2011	1731	441(R4) 978 978 106 106==24573(x2)...== 978 978 106 106 tt tt	MCW	Tue	(FMB) ger- many
5397	M32	7-12-2011	0520	CXTS: CIS military mobile units. Duplex radio check with net control BPTO	CW		(PPA)
5399	MC03	9-12-2011	2322	Chinese "Air Defense" cut-number msgs & time code "T7UU" (=0722 local > UTC+8hrs)	CW		(ALF)
5405.0	M42	13-12-2011	2120	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) ger- many
5405.0	M42	27-12-2011	2120	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) ger- many
5417.0	V2a	31-12-2011	0200	SSYL atencion: 27412 76721 70412 Very weak sig.	AM	Sat	(westli)
5426	M51	14-12-2011	0204	French Mil.	CW		(Jon-FL)
5430.0	M14	17-12-2011	0800	171 (R4) 381 381 15 15 == 56342(x2)...	CW	Sat	(FMB) ger- many
5435.0	M42	13-12-2011	2200	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) ger- many
5435.0	M42	27-12-2011	2200	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) ger- many
5448	S30	9-12-2011	1028	Dlya DK1? 1 6I2ZH ZHD9V SI?5TS 62BV 81BR M7KS PMV5 L?GI? TSHCHSHCHS	USB		(Tucana)
5448	S30	11-12-2011	1242	8C1SHCH 16 771 ABSENTEYEIST 88 70 98 31	USB		(Tucana)
5448	S30	12-12-2011	0618	Dlya ZH1TR M1SE Z7PM ?O6P I?KH?I? DMTS3 49FT TS2ZA LI27 INNTS	USB		(Tucana)
5448	S30	12-12-2011	1133	8S1SHCH 49 391 KHABUR 43 56 11 68	USB		(Tucana)
5448	S30	13-12-2011	1220	Dlya VKY1 KHTSLF 61H ZBIL L7O6 V?Z? NLTSE 8?4O AUI8 2ZSHCHN	USB		(Tucana)
5448	S30	15-12-2011	0606	Dlya ZBIL L7O5 V?Z? NLTSE 8?4O AUI8 2ZSHCHN V2MZ ZHSK4 SB7Z	USB		(Tucana)
5448	S30	15-12-2011	1218	Dlya TAZ7 PYTSM Y8VM 8MUO TUZP 5I?7SHCH VLDKH 27SHCH? N1DU 53OB	USB		(Tucana)
5448	S30	15-12-2011	1242	8S1SHCH 69 873 SUKHUYADNIK 80 78 14 44	USB		(Tucana)
5448	S30	16-12-2011	0836	Dlya 49FT TS2ZA LI27 INNTS SHCHGI?P 8TSSHCHI? TZLM FYSE F61H 37TSH	USB		(Tucana)
5448	S30	17-12-2011	1146	Dlya Y8BM PYTSM TAZ7 CB7Z ZHCK4 V2MZ 2ZSHCHN AUI8 8?4O NLTSE	USB		(Tucana)
5448	S30	18-12-2011	0448	Dlya M1SE Z7PM ?O6P I?KH?I? Z?1B NI9V DMTS3 49FT TS2ZA LI27	USB		(Tucana)
5448	S30	18-12-2011	0834	8S1SHCH 34 324 ATTICHESKII? 89 39 00 10	USB		(Tucana)

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5448	S30	19-12-2011	0624	DIya 2ZSHCHN V2MZ ZHSK4 SB7Z TAZ7 PYTSM Y8VM 8MUO TUZP 5I?7SHCH	USB		(Tucana)
5448	S30	19-12-2011	1048	DIya VLDKH 27SHCH? N1DU 53OB 78MV A3PS ?MSV YGI?? 12SI 79AI?	USB		(Tucana)
5448	S30	20-12-2011	0623	DIya TZLM FY5E F61H 37TSH MUDR 7BHSCH ZH7HZH YMA5 VTKH3 AGDT	USB		(Tucana)
5448	S30	21-12-2011	0718	8S1SHCH 47 313 BIURAT 83 39 42 87	USB		(Tucana)
5448	S30	21-12-2011	1101	DIya 53OB 78MV A3PS ?MSV YGI?? 12SI 79AI? P?KHSCH 6EKHB ?UE8	USB		(Tucana)
5448	S30	23-12-2011	1235	8C1SHCH 13 010 FELLO 96 66 12 79	USB		(Tucana)
5448	S30	24-12-2011	0604	DIya ZH7NZH YMA5 VTKH3 AGDT ?U1B OSOG BO6S F56SHCH 9GSA ZHBZU	USB		(Tucana)
5448	S30	25-12-2011	1210	8S1SHCH 24 192 NALIVCHATYI? 51 47 93 86	USB		(Tucana)
5448	S30	25-12-2011	1224	DIya 5I?7SHCH VLDKH 27SHCH? N1DU 53OB 78MV A3PS ?MSV YGI?? 12SI	USB		(Tucana)
5448	S30	26-12-2011	0720	8S1SHCH 70 294 VERTOGRAD 18 23 91	USB		(Tucana)
5448	S30	27-12-2011	0804	DIya CB7Z TAZ7 PYTSM Y8BM 8MUO TUZP 5I?7SHCH BLDKH 27SHCH? N1DU	USB		(Tucana)
5448	S30	27-12-2011	1238	8S1SHCH 52 602 RAZDVOENIE 95 32 36 18	USB		(Tucana)
5448	S30	27-12-2011	1248	DIya 53OB 78MV A3PS ?MSV YGI?? 12SI 79AI? P?KHSCH 6EKHB ?UE8	USB		(Tucana)
5448	S30	28-12-2011	0725	DIya 37TSN MUDR 7VNSHCH ZH7NZH YMA5 VTKH3 AGDT ?U1B OSOG BO6S	USB		(Tucana)
5448	S30	28-12-2011	1227	8S1SHCH 59 682 AKROPOMA 06 69 93 96	USB		(Tucana)
5448	S30	29-12-2011	1228	DIya ?MSV YGI?? 12SI 79AI? P?KHSCH 6EKHB ?UE8 TSP3? SHCHT3O TSIKHS	USB		(Tucana)
5448	S30	31-12-2011	1208	DIya CB7Z TAZ7 PYTSM Y8BM 8MUO TUZP 5I?7SHCH 27SHCH' N1DU 53OB	USB		(Tucana)
5449	E07	17-11-2011	2130	744 744 744 000...	AM		(AIK)
5449	E07	8-12-2011	2130	OM 774 744 744 1... 582 47 582 47 59126 43616 40527 35893 68306 42931 66599 32719 92882 10398 93811 .....	AM		(AIK)
5449	E07	22-12-2011	2130	774 774 774 1 238 48 21334 82740 85131 ....	AM		(AIK)
5500	M89	1-12-2011	1400	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW		(JPL-HK)
5500	M89	1-12-2011	1822	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW		(JPL-HK)
5500	M89	1-12-2011	2254	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW		(JPL-HK)
5500	M89	2-12-2011	1204	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW		(JPL-HK)
5500	M89	2-12-2011	1600	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	2-12-2011	1852	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	5-12-2011	1447	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	5-12-2011	2137	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	6-12-2011	1921	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	6-12-2011	2225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	7-12-2011	1459	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	9-12-2011	2046	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	10-12-2011	1126	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	10-12-2011	1437	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	11-12-2011	1426	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	11-12-2011	1647	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	11-12-2011	1844	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	12-12-2011	1327	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	12-12-2011	1418	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	12-12-2011	2059	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	13-12-2011	1243	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	13-12-2011	1727	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	13-12-2011	2147	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)

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5500	M89	14-12-2011	1346	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	14-12-2011	2017	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	18-12-2011	2044	V 7NPE de QV5B	CW		(MPJ)
5500	M89	22-12-2011	1331	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	23-12-2011	1448	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	23-12-2011	1748	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	24-12-2011	1333	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	24-12-2011	2249	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW		(JPL-HK)
5500	M89	26-12-2011	2229	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	27-12-2011	2027	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	27-12-2011	2235	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW		(JPL-HK)
5500	M89	28-12-2011	1335	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	28-12-2011	1916	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	28-12-2011	2150	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	29-12-2011	1817	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	29-12-2011	2301	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225 Went silent at 2317z but back up at 2321z	CW		(JPL-HK)
5500	M89	30-12-2011	1310	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	30-12-2011	1904	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5500	M89	31-12-2011	1634	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW		(JPL-HK)
5637	V21	26-12-2011	1400	Too weak to hear numbers but definitely V21	USB		(westt1us)
5637	V21	28-12-2011	1400	Weak but numbers were audible today	USB		(westt1us)
5637	V21	31-12-2011	1400	heard a microphone keyed several times then heard "41" or 40 1, this must be the shortest Babler transmission ever.	AM		(westt1us)
5709	M12	21-12-2011	1540	214 1 977 75 46188 01728 ... 46493 000 000	CW		(Danix)
5709	M12	28-12-2011	1540	214 1 246 129, 25 wpm	CW		(Danix)
5715	M94	11-10-2011	1400	ID 935	MCW		(Token)
5715	M94	12-10-2011	1400	ID 935	MCW		(Token)
5715	M94	12-11-2011	1400	ID 935	MCW		(Token)
5715	M94	27-11-2011	1400	ID 935	MCW		(Token)
5715	V24	12-3-2011	1430	YL KK 5f	AM		(Token)
5715	V24	11-4-2011	1430	YL KK 5f	AM		(Token)
5715	V24	12-4-2011	1430	YL KK 5f	AM		(Token)
5715	V24	11-10-2011	1430	YL KK 5f	AM		(Token)
5715	V24	12-10-2011	1430	YL KK 5f	AM		(Token)
5715	V24	11-11-2011	1430	YL KK 5f	AM		(Token)
5715	V24	11-11-2011	1530	YL KK 5f	AM		(Token)
5715	V24	11-11-2011	1630	YL KK 4f	AM		(Token)
5715	V24	12-11-2011	1430	YL KK 5f	AM		(Token)
5715	V24	12-11-2011	1530	YL KK 5f	AM		(Token)
5715	V24	20-11-2011	1430	YL KK 5f	AM		(Token)
5715	V24	24-11-2011	1300	YL KK 5f	AM		(Token)
5715	V24	19-12-2011	1300	YL KK 5f	AM		(Token)
5715	V24	25-12-2011	1240	YL KK 5f	AM		(Token)
5715	V24	25-12-2011	1300	YL KK 5f	AM		(Token)
5752	M21	4-12-2011	1658	Russian Air Defence =992059??8?????	CW		(MPJ)
5767	XPA	6-12-2011	1400	Msg	MFSK		(AB)
5784	M12	24-12-2011	0600	751 000	CW		(Danix)
5784	M12	30-12-2011	0600	751 1 740 95, 25 wpm	CW		(Danix)
5788	M12	21-12-2011	1740	463... unreadable, 27 wpm	CW		(Danix)
5788	M12	28-12-2011	1740	463..., unreadable, 27 wpm	CW		(Danix)
5796	E06	3-12-2011	0130	759 401 32	AM		(Spectre)
5796	E06	3-12-2011	0230	759 401 32	AM		(Spectre)
5796	E06	4-12-2011	0130	759 401 32	AM		(Spectre)

frequency	enigma	date	UTC	remarks	mode	day	contributor
5796	E06	4-12-2011	0230	759 401 32	AM		(Spectre)
5796	E06	10-12-2011	0130	759 862 31	AM		(Spectre)
5796	E06	11-12-2011	0130	759 862 31	AM		(Spectre)
5796	E06	17-12-2011	0130	759 126 34	AM		(Spectre)
5796	E06	18-12-2011	0130	759 126 34	AM		(Spectre)
5796	E06	24-12-2011	0130	759 308 42	AM		(Spectre)
5796	E06	25-12-2011	0130	759 308 42 33816 22068 62918 04804 25771 ... 98563 308 42 00000	AM		(Danix)
5796	E06	25-12-2011	0130	759 308 42	AM		(Spectre)
5796	E06	31-12-2011	0130	759 180 32	AM		(Spectre)
5796	E06	31-12-2011	0130	755 repeated for 5 minutes 180 180 32 32. Mes- sage. Ended 180 180 32 32 00000	AM		(westt1us)
5796	E06	1-1-2012	0130	759 180 32	AM		(Spectre)
5796.0	E06	3-12-2011	0030	weak signal, fadings	AM	Sat	(IP-NL)
5796.0	E06	4-12-2011	0130	Russian Man	USB	Sun	(Saber)
5796.0	E06	11-12-2011	0130	Russian Man	USB	Sun	(Saber)
5796.0	E06	18-12-2011	0130	Russian Man	USB	Sun	(Saber)
5800.0	M8a	31-12-2011	0600	5f cut nums: ..... VG sig. Up late IP.	MCW	Sat	(westli)
5801	M89	13-12-2011	0325	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW		(JPL-HK)
5810	M01	3-12-2011	1500	197 197 197 .....	CW		(AB)
5810	M01	17-12-2011	1500	197... 000	CW		(AIK)
5810	M01b	16-12-2011	1615	158 738 30 = 02372	CW		(FN)
5818	XPA	8-12-2011	0540	890 000 03985 00001 00000 10140	MFSK		(Danix)
5824	E07	2-11-2011	2040	Unreadable	AM		(AIK)
5836	E07	18-12-2011	1820	OM 989 989 989 000	AM		(AIK)
5836	E07	18-12-2011	1820	989 989 989 000	AM		(FN)
5843	M12	27-12-2011	0520	408 1 548 189, 25 wpm	CW		(Danix)
5846	E07a	8-12-2011	0550	188 1 62128 124 69 64125 70735 04391 65921 90107 ... 53799 000 000	USB		(Danix)
5861.0	M21	30-12-2011	0713		CW	Fri	
5864	E07	2-11-2011	2100	815 815 815 1 62128 (6x) 124 69 124 69 64125 70735 04391 65921	AM		(AIK)
5864	E07a	16-11-2011	2100	OM 815 815 815 000...	AM		(AIK)
5864	E07a	7-12-2011	2100	815 1 62128 124 69	AM		(Spectre)
5864	XPA	6-12-2011	1940	138 138 138 1 138 138 138 1 5FGs	MFSK		(AIK)
5864	XPA	8-12-2011	1940	138 138 138 1 6 00212 00227 71112 39256 ....	MFSK		(AIK)
5883	V02a	17-12-2011	0700	DGI	AM		(swl73oz)
5883.0	V2a	25-12-2011	0700	57271 83762 56651. IP.	AM	Sun	(BCA)
5886.0	v2a	26-12-2011	0710	coming in pretty broken down here in the bayou.	AM	Mon	(M56007)
5898	V02a	17-12-2011	0800	DGI	AM		(swl73oz)
5898	V02a	31-12-2011	0800	A 14851 37882 12472 SAT	AM		(HS2)
5898.0	V02	13-12-2011	0832	fairly clean signal outdoors	AM	Tue	(RILA)
5938	E07	6-11-2011	1840	OM 199 199 199 1... 502 34 502 34 49305 04214 02355 05061 73650	AM		(AIK)
5938	E07	20-11-2011	1840	OM 199 199 199 1 199 199 199 1... 796 94 796 94 73038 53153	AM		(AIK)
5938	E07	27-11-2011	1840	OM 199 199 199 1 199 199 199 1... 415 36 415 36 82421 98737	AM		(AIK)
6002	M32	27-11-2011	0800	CIS Mil: "BK BK RPT AA PORG I K 6 K RPTAA LüBO V K BK BK RPT AA WA K DE LTVI RPT CH9K"	CW		(BCI)
6140	E25	3-12-2011	0801	360 6580 6010 1514 3896 1189 9242 6010 1007 YL, EOM	AM		(MG)
6140	E25	3-12-2011	0930	333 4001 7030 4348 4835 7097 3619 4390 4613 1035 7030 tone, YL, EOM	AM		(MG)
6140	E25	3-12-2011	1032	672 1527 2032 4752 1569 2499 9206 3255 5776 YL, EOM	AM		(MG)

frequency	enigma	date	UTC	remarks	mode	day	contributor
6140	E25	3-12-2011	1046	128 4568 5990 2360 9568 3380 1809 0430 7141 2360 YL, EOM	AM		(MG)
6140	E25	5-12-2011	0930	133 9018 7018 1400 0765 0732 9133 5497 tone 0928z, buzzes, YL, Mx1, 9018 then call, pauses, AM	AM		(AB)
6140	E25	6-12-2011	0801	360 7590 1510 6060 3137 7735 4027 3558 1510 1007 tone, OM live, Mx3, pause, Mx3, tone	AM		(MG)
6140	E25	6-12-2011	0816	185 6493 4120 1089 9853 8075 4954 9141 8489 187 6 tone, OM live, tone	AM		(MG)
6140	E25	6-12-2011	0929	133 (as of 05/12) 135 64 tone 0927z, YL	AM		(MG)
6140	E25	6-12-2011	1044	128 1066 6990 6130 7768 6597 3854 7772 5558 6130 tone, YL	AM		(MG)
6140	E25	7-12-2011	0800	360 5 first grps of 06/12 tone 0756z, YL, ring sounds (Windows?)	AM		(MG)
6140	E25	7-12-2011	1045	128 (as of 06/12) tone, YL, irregular, audio prob- lems, pause, Rx3	AM		(MG)
6140	E25	12-12-2011	0831	701 5611 1430 0201 3579 7977 9425 1253 7669 3650 1430 140 tone, YL, slows down, 0833z brief tone, YL speeds up 701 slows down, 0838z EOM, brief tone, 140 rptd, music, carrier QRT 0844z	AM		(MG)
6140	E25	12-12-2011	0845	169 2140 1540 1056 1721 1721 7560 3997 6991 2217 3402 0474 1634 ]0852z tone, YL, slows down, carrier QRT 0856z	AM		(MG)
6140	E25	12-12-2011	1000	570 4630 1038 9584 6441 0592 2270 2724 5306 carrier 0948z, tone, YL fast	AM		(MG)
6140	E25	12-12-2011	1046	880 1810 7111 1099 6196 8979 1069 0704 0618 8111 7852 1810 tone, YL, EOM	AM		(MG)
6140	E25	13-12-2011	0930	135 67 333 6080 1620 9824 8561 1036 0676 1035 1620]0935z tone, YL, 13 rptd, Mx3	AM		(MG)
6140	E25	14-12-2011	0758	116 1280 1035 3160 4772 8494 8059 6776 0965 tone, YL, AM, carrier MG WED	AM		(MG)
6140	E25	14-12-2011	0830	YL, "9...9...9", music, stops 0836z, carrier QRT 0838z	AM		(MG)
6140	E25	14-12-2011	0946	350 4121 0401 1051 3598 5004 9363 2982 1692 7232 8011 5021 7285 1633 7367 0401 tone, IO, YL "33", EOM	AM		(MG)
6140	E25	15-12-2011	0800	116 (as of 14/12) WinXP sounds, tone, YL, EOM	AM		(MG)
6140	E25	15-12-2011	0837	Song: Abdel Halim Hafez - Ahwak (I love you)	AM		(MG)
6140	E25	17-12-2011	1100	carrier i.p.	AM		(MG)
6140	E25	18-12-2011	0800	116 2280 9433 5520 7478 1201 5608 9405 3128 tone, YL, EOM	AM		(MG)
6140	E25	18-12-2011	0917	950 2001 8121 5210 3919 9177 9251 2180 5872 2533 5210 YL, EOM	AM		(MG)
6140	E25	20-12-2011	1044	128 6765 7921 3930 8785 7711 8194 4474 4021 0385 2075 8861 3930 carrier 1040z, tone, YL, EOM	AM		(MG)
6140	E25	20-12-2011	1048	128 (as of 20/12) YL, EOM	AM		(MG)
6140	E25	22-12-2011	1046	128 9861 8961 5750 4848 0653 0324 1720 7892 2525 3905 7226 7331 7254 2058 8852 5750 127 tone, YL, EOM only	USB		(MG)
6140	E25	23-12-2011	1045	127 128 (as of 22/12) tone, YL	AM		(MG)
6140	E25	24-12-2011	0929	YL 333 333 333... 7001 0120 5159 6912 8665 0803 7044 4386 4328 0120 REBEAT REBEAT 7001 0120 5159 6912 8665 0803 7044 4386 4328 0120 EOM. Windings sound, Windows sounds	USB		(AIK)
6140	E25	24-12-2011	0929	333 7001 0120 5159 6912 8665 0803 7044 4386 4328 0120 tone, YL	AM		(MG)
6140	E25	24-12-2011	1030	YL 675 88 675 88 675 88 675 88 675 88... EOM	USB		(AIK)
6140	E25	25-12-2011	0900	111 5221 3310 2041 6393 0561 4291 0549 9842 7963 5568 1642 8605 3736 3310 tone, YL	AM		(MG)
6140	E25	27-12-2011	0935	333 8011 4930 9607 6631 4636 3268 0436 1560	AM		(MG)

frequency	enigma	date	UTC	remarks	mode	day	contributor
				6401 5733 4930 YL, EOM			
6140	E25	27-12-2011	1045	128 2566 9990 2960 7768 2247 7177 3026 2974 2960 tone, EOM	AM		(MG)
6140	E25	28-12-2011	1045	128 (as of 27/12) tone, YL, EOM, WinXP "clicks" carrier afterwards	USB		(MG)
6140	E25	29-12-2011	0839	"Spider Solitaire" sounds, digi QRM due to E25 carrier	USB		(MG)
6140	E25a	1-12-2011	0932	135 YL, Mx3	AM		(MG)
6140	E25a	7-12-2011	0816	187 7 tone, YL, Mx3 etc, carrier QRT 0829z	AM		(MG)
6140	E25a	7-12-2011	0931	135 65 66 tone, YL, Mx3, Rx3, EOT	AM		(MG)
6140	E25a	12-12-2011	0800	117 7 tone, YL, 0802z voice slows down, carrier QRT 0830z	AM		(MG)
6140	E25a	13-12-2011	0830	702 22 tone, YL, AM, carrier	AM		(MG)
6140	E25a	13-12-2011	0845	162 81 tone, YL, AM, carrier	AM		(MG)
6140	E25a	13-12-2011	0959	575 66 tone, YL, Mx3, Rx3, EOM	AM		(MG)
6140	E25a	13-12-2011	1115	887 9 tone, YL, Mx3, Rx3, EOM	AM		(MG)
6140	E25a	17-12-2011	1045	126 49 tone, YL MG SAT	AM		(MG)
6140	E25a	20-12-2011	0930	135 68 carrier 0924z, tone, YL, Mx3	AM		(MG)
6140	E25a	24-12-2011	1030	675 88 tone, YL, EOM EOT	AM		(MG)
6140	E25a	26-12-2011	0900	200 1 tone, YL	AM		(MG)
6140	E26	8-12-2011	0802	364 9 tone, YL, irregular, "Message"	AM		(MG)
6140	E26	8-12-2011	0815	126 48 YL, nearly incomprehensible	AM		(MG)
6215	V24	12-2-2011	1500	YL KK 5f	AM		(Token)
6215	V24	12-3-2011	1500	YL KK 5f	AM		(Token)
6215	V24	11-10-2011	1500	YL KK 5f	AM		(Token)
6215	V24	12-10-2011	1500	YL KK 5f	AM		(Token)
6215	V24	11-11-2011	1500	YL KK 5f	AM		(Token)
6215	V24	11-11-2011	1600	YL KK 4f	AM		(Token)
6215	V24	12-11-2011	1500	YL KK 5f	AM		(Token)
6215	V24	19-11-2011	1500	YL KK 5f	AM		(Token)
6215	V24	26-11-2011	1500	YL KK 5f	AM		(Token)
6215	V24	27-11-2011	1500	YL KK 5f	AM		(Token)
6215	V24	18-12-2011	1500	YL KK 5f	AM		(Token)
6215.0	V24	26-12-2011	1500	Strong signal.	USB	Mon	(PanDR)
6220	M32	20-12-2011	1714	GQTA: Russian Mil. Bcasts msg to collective JH1M: "JH1M QTC ZAL AR. GQTA 825 17 20 2106 825 = ZAL 146 = TWDTK PPPPP DTNKO ... TBAHT WPP-E 315 K. Asks for QSL from GL6P SN4Q NB5J G____ 7QMW & KLNA"	CW		(MPJ)
6222.2	M21	19-12-2011	0034	Russian Air Defense =99?0435?9????? =99?0437?9?????	CW		(WP3)
6310	V24	11-6-2011	1530	YL KK 5f	AM		(Token)
6310	V24	11-6-2011	1630	YL KK 5f	AM		(Token)
6310	V24	11-7-2011	1300	YL KK 5f	AM		(Token)
6310	V24	11-9-2011	1330	YL KK 5f	AM		(Token)
6310	V24	12-9-2011	1330	YL KK 5f	AM		(Token)
6310	V24	12-10-2011	1330	YL KK 5f	AM		(Token)
6310	V24	19-11-2011	1630	YL KK 5f	AM		(Token)
6310	V24	20-11-2011	1630	YL KK 5f	AM		(Token)
6310	V24	24-11-2011	1330	YL KK 5f	AM		(Token)
6310	V24	28-11-2011	1300	YL KK 5f	AM		(Token)
6310	V24	15-12-2011	1430	YL KK 5f	AM		(Token)
6310	V24	16-12-2011	1430	YL KK 5f	AM		(Token)
6310	V24	19-12-2011	1330	YL KK 4f	AM		(Token)
6310	V24	23-12-2011	1330	YL KK 5f	AM		(Token)
6310	V24	24-12-2011	1330	YL KK 5f	AM		(Token)

frequency	enigma	date	UTC	remarks	mode	day contributor
6310.0	V24	19-12-2011	1630		AM	Mon (AK2)
6310.0	V24	20-12-2011	1630		AM	Tue (AK2)
6320	S06s	13-12-2011	0715	374 265 8 46062 68672 97478 39685 30485 96632 52537 53317 265 8 00000	AM	(AB)
6345	M32	9-12-2011	0305	RIT: Russian Navy Northern Fleet HQ Severomorsk msg to collective RLO.	CW	(ALF)
6378	E06	15-12-2011	1630	321 486 15 63527 38465 89056 74352 12385 05463 27854 36251 36490 64578 53257 43689 54327 54678 53421 486 15 00000	AM	(ATCManch)
6378	M08a?	13-12-2011	1630	Barely readable	CW	(ATCManch)
6378	S28	15-12-2011	1630	Buzzer operating in faint LSB	LSB	(ATCManch)
6379	M22	26-11-2011	2113	4XZ Navy Haifa	CW	(norave)
6379	M22	6-12-2011	2225	4XZ: Israeli Navy Haifa "vvv de 4xz 4xz" tfc msg nr 781 gr56 5L	CW	(SW2)
6379	M22	30-12-2011	1855	4XZ: Haifa Naval "VVV DE 4XZ"	CW	(VL)
6391	M32	16-12-2011	0402	CIS Mil. VYRT DE BV7R	CW	(PPA)
6433	E11	3-12-2011	1320	299/00	USB	(AB)
6433	G11	15-11-2011	1755	YL 272/92(?)	USB	(AIK)
6433	G11	19-11-2011	1325	YL 299/00 299 STRICH 00 299 STRICH 00...	USB	(AIK)
6433	G11	20-11-2011	1755	YL 272/32 272 STRICH 32 272 STRICH 32...ACHTUNG 699 55 699 55 00	USB	(AIK)
6433	G11	22-11-2011	1755	YL 270/00 270 STRICH 00 270 STRICH 00...	USB	(AIK)
6433	G11	25-11-2011	1325	YL 299/00 299 STRICH 00 299 STRICH 00...	USB	(AIK)
6433	G11	27-11-2011	1755	YL 270/00 270 STRICH 00 270 STRICH 00...	USB	(AIK)
6433	G11	29-11-2011	1755	YL 270/00 270 STRICH 00 270 STRICH 00...	USB	(AIK)
6433	G11	17-12-2011	1325	YL 299 STRICH 00 299 STRICH 00...	USB	(AIK)
6433	G11	18-12-2011	1755	YL 270 STRICH 00	USB	(AIK)
6433	G11	24-12-2011	1325	YL 299/00	USB	(AIK)
6433	G11	24-12-2011	1328	299/00	USB	(ALF)
6433	G11	26-12-2011	0940	275/00	USB	(AB)
6433	G11	31-12-2011	1330	in progress	USB	(AB)
6433	S11a	17-12-2011	1020	221/00	USB	(Danix)
6433	S11a	31-12-2011	1020	227/32 85955 53395 89703 83033 38603...	USB	(MG)
6480	G11	1-12-2011	0940	275/00	USB	(AB)
6480	G11	29-12-2011	0940	275/00	USB	(AB)
6600	M42	16-12-2011	0420	Russian Gov: RUU76 wkg RUA41 fr ZHC? into vy slow reversals, later ffc in 100Bd?/1000Hz.	FSK- CW/1000Hz	(AKF)
6668	S06s	5-12-2011	1610	YL 176 176 176...	USB	(AIK)
6668	S06s	12-12-2011	1610	YL 176 176 176... 234 234 5 5 89675 89675 45312 45312 78695 78695 34331 34331 09786 09786 234 234 5 5 00000	USB	(AIK)
6668	S06s	19-12-2011	1610	176 948 5 10480	USB	(FN)
6768	SK01	26-12-2011	1600	32 second bursts repeated every 5 minutes	RDFT	(westt1us)
6768	V02a	19-12-2011	0400		AM	(Jon-FL)
6777	E07	17-11-2011	2110	744 744 744 000...	AM	(AIK)
6777	E07	8-12-2011	2110	OM 774 744 744 1... 582 47 582 47 59126 43616 40527 35893 68306 42931 66599 32719 92882 10398 93811 .....	AM	(AIK)
6777	E07	22-12-2011	2110	774 774 774 1 238 48 21334 82740 85131 .....	AM	(AIK)
6778	E07	12-12-2011	2020	OM 472 472 472 1 472 472 472 1... 577 20 577 20 20492 11032 .....	AM	(AIK)
6778	E07	19-12-2011	2020	472 472 472 000	AM	(FN)
6786	M08a	26-12-2011	2000		CW	(westt1us)
6788	S06	3-12-2011	1605	134 134 134 00000	USB	(AB)
6788	S06	17-12-2011	1605	134 134 134 00000	AM	(AIK)
6788	S06	24-12-2011	1605	OM 134 134 134 00000	AM	(AIK)



frequency	enigma	date	UTC	remarks	mode	day	contributor
6794.0	M42	13-12-2011	1700	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) germany
6794.0	M42	13-12-2011	2310			Tue	(FMB) germany
6795.0	M42	27-12-2011	1700	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) germany
6795.0	M42	27-12-2011	2310	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) germany
6802	M12	21-12-2011	1720	463... unreadable, 27 wpm	CW		(Danix)
6802	M12	28-12-2011	1720	463..., unreadable, 27 wpm	CW		(Danix)
6818.0	M51	30-12-2011	0711	(i.p.)	MCW	Fri	(FMB)
6823	XPA	10-11-2011	1935	158 158 158 1... 00579 00215 48994 85535... 78251 05015 90275 42825 08640 LG 27201	MFSK		(AIK)
6823	XPA	15-11-2011	1940	158 158 158 1... 6 00314 00149 10577 97364 78876 85042 05933	MFSK		(AIK)
6823	XPA	17-11-2011	1940	158 158 158 1...6 00314 00149 10577 97364 78876 85042 05933	MFSK		(AIK)
6823	XPA	22-11-2011	1940	158 158 158 000 158 158 158 000 158 158 158 000 01717 00001 00000 10140	MFSK		(AIK)
6823	XPA	29-11-2011	1940	158 158 158 000 158 158 158 000... 09119 00001 00000 10140	MFSK		(AIK)
6825	M51	25-12-2011	1312	5 letters blocks "bt nr 10 d "	CW		(ML4)
6840	M89	1-12-2011	1420	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Thu) //4860	CW		(JPL-HK)
6840	M89	1-12-2011	1823	VVV (x3) Q2M DE NYZ (x2) QSA ? K (In Progress) (Thu) //4860	CW		(JPL-HK)
6840	M89	2-12-2011	1220	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Fri) //4860	CW		(JPL-HK)
6840	M89	6-12-2011	0020	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Tue) //4860	CW		(JPL-HK)
6840	M89	6-12-2011	1922	VVV (x3) Q2M DE NYZ (x2) QSA ? K (In Progress) (Tue) //4860	CW		(JPL-HK)
6840	M89	7-12-2011	1820	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Wed) //4860	CW		(JPL-HK)
6840	M89	9-12-2011	2120	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Fri) //4860	CW		(JPL-HK)
6840	M89	10-12-2011	0520	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Sat) //10640	CW		(JPL-HK)
6840	M89	10-12-2011	1120	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Sat) //4860	CW		(JPL-HK)
6840	M89	11-12-2011	1420	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Sun) //4860	CW		(JPL-HK)
6840	M89	11-12-2011	1921	VVV (x3) Q2M DE NYZ (x2) QSA ? K (In progress - Stopped suddenly) (Sun) //4860	CW		(JPL-HK)
6840	M89	12-12-2011	1323	VVV (x3) Q2M DE NYZ (x2) QSA ? K (In progress) (Mon) //4860	CW		(JPL-HK)
6840	M89	12-12-2011	2120	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Mon) //4860	CW		(JPL-HK)
6840	M89	13-12-2011	1720	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Tue) //4860	CW		(JPL-HK)
6840	M89	13-12-2011	1819	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Tue) //4860	CW		(JPL-HK)
6840	M89	14-12-2011	0420	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Wed) //10640	CW		(JPL-HK)
6840	M89	14-12-2011	2025	vvv Q2M Q2M Q2M de NYZ NYZ NYZ	CW		(FN)
6840	M89	21-12-2011	0624	(In progress) VVV (x3) Q2M DE NYZ (x2) QSA ? K (Wed) //10640	CW		(JPL-HK)
6840	M89	22-12-2011	0520	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Thu)	CW		(JPL-HK)

frequency	enigma	date	UTC	remarks	mode	day	contributor
				//10640			
6840	M89	22-12-2011	1420	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Thu) //10640	CW		(JPL-HK)
6840	M89	24-12-2011	1420	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Sat) //4680	CW		(JPL-HK)
6840	M89	24-12-2011	1720	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Sat) //4680	CW		(JPL-SVK)
6840	M89	28-12-2011	0520	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Wed) //10640	CW		(JPL-HK)
6840	M89	28-12-2011	1320	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Wed) //4860	CW		(JPL-HK)
6840	M89	28-12-2011	1920	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Wed) //4860	CW		(JPL-HK)
6840	M89	29-12-2011	0320	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Thu) //10640	CW		(JPL-HK)
6840	M89	29-12-2011	1820	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Thu) //4860	CW		(JPL-HK)
6840	M89	30-12-2011	0220	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Fri) //10640	CW		(JPL-HK)
6840	M89	30-12-2011	0420	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Fri) //10640	CW		(JPL-HK)
6840	M89	30-12-2011	1320	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Fri) //4860	CW		(JPL-HK)
6840	M89	30-12-2011	1920	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Fri) //4860	CW		(JPL-HK)
6840	M89	31-12-2011	0520	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Sat) //10640	CW		(JPL-HK)
6840	M89	31-12-2011	1720	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Sat) //4860	CW		(JPL-HK)
6840.0	M42	30-12-2011	0710	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Fri	(FMB)
6846	E07a	8-12-2011	0610	188 1 62128 124 69 64125 70735 04391 65921 90107 ... 53799 000 000	USB		(Danix)
6868	M89	1-12-2011	1946	V RXP7 RXP7 RXP7 DE CZT2 CZT2	CW		(BCI)
6884.0	X06	19-12-2011	1644	612534	AM	Mon	(FMB) ger- many
6904	M12	31-10-2011	1939	257 257 257 1...40429 51540... 61?54... 73?44... 45265	CW		(AIK)
6904	M12	22-12-2011	1940	257 1 9834 43, 27 wpm, very weak	CW		(Danix)
6904	M12	26-12-2011	1840	257 257 257 1 7705 48 7705 48 07634 56579 83337 ....	CW		(Danix)
6904	M12	26-12-2011	1940	257 1 6707 70, very weak, 27 wpm	CW		(Danix)
6904	M12	29-12-2011	1740	257 1 2801 67, weak, 27 wpm	CW		(Danix)
6909	M12	21-12-2011	1520	214 1 977 75 46188 01728 ... 46493 000 000	CW		(Danix)
6909	M12	28-12-2011	1520	214 1 246 129, 25 wpm	CW		(Danix)
6924	E07	2-11-2011	2020	798/00 798 798 798 0 0 0...	AM		(AIK)
6924	E07	16-11-2011	2020	OM 798 798 798 000...	AM		(AIK)
6930	S6930	1-12-2011	1319	test count	USB		(ScSw)
6930	S6930	1-12-2011	1325	test count	USB		(ScSw)
6930	S6930	1-12-2011	1421	message	USB		(ScSw)
6930	S6930	2-12-2011	0624	test count	USB		(ScSw)
6930	S6930	2-12-2011	0722	message	USB		(ScSw)
6930	S6930	2-12-2011	0905	message	USB		(ScSw)
6930	S6930	2-12-2011	1235	test count	USB		(ScSw)
6930	S6930	2-12-2011	1309	message	USB		(ScSw)
6930	S6930	2-12-2011	1427	test count	USB		(ScSw)
6930	S6930	2-12-2011	1431	message	USB		(ScSw)

frequency	enigma	date	UTC	remarks	mode	day contributor
6930	S6930	6-12-2011	0634	test count	USB	(ScSw)
6930	S6930	12-12-2011	0804	test count	USB	(ScSw)
6930	S6930	12-12-2011	1414	test count	USB	(ScSw)
6930	S6930	13-12-2011	0720	test count	USB	(ScSw)
6930	S6930	13-12-2011	0811	message	USB	(ScSw)
6930	S6930	13-12-2011	1319	message	USB	(ScSw)
6930	S6930	13-12-2011	1407	test count	USB	(ScSw)
6930	S6930	13-12-2011	1458	message	USB	(ScSw)
6930	S6930	15-12-2011	1347	S28 - the buzzer	USB	(ScSw)
6930	S6930	16-12-2011	0706	test count	USB	(ScSw)
6930	S6930	16-12-2011	0717	test count	USB	(ScSw)
6930	S6930	16-12-2011	0734	test count	USB	(ScSw)
6930	S6930	16-12-2011	0838	message	USB	(ScSw)
6930	S6930	16-12-2011	0916	message	USB	(ScSw)
6930	S6930	16-12-2011	1221	message	USB	(ScSw)
6930	S6930	16-12-2011	1335	message	USB	(ScSw)
6930	S6930	18-12-2011	0925	message	USB	(ScSw)
6930	S6930	18-12-2011	1415	message	USB	(ScSw)
6930	S6930	18-12-2011	1451	message	USB	(ScSw)
6930	S6930	19-12-2011	0741	message	USB	(ScSw)
6930	S6930	19-12-2011	0917	message	USB	(ScSw)
6930	S6930	19-12-2011	1314	message	USB	(ScSw)
6930	S6930	20-12-2011	0809	message	USB	(ScSw)
6930	S6930	20-12-2011	0925	message	USB	(ScSw)
6930	S6930	21-12-2011	0801	message	USB	(ScSw)
6930	S6930	21-12-2011	0847	message	USB	(ScSw)
6930	S6930	21-12-2011	0921	message	USB	(ScSw)
6930	S6930	21-12-2011	1216	test count	USB	(ScSw)
6930	S6930	21-12-2011	1220	message	USB	(ScSw)
6930	S6930	21-12-2011	1325	message	USB	(ScSw)
6930	S6930	21-12-2011	1414	message	USB	(ScSw)
6930	S6930	21-12-2011	1830	S28 - the Buzzer	USB	(ScSw)
6930	S6930	22-12-2011	0649	message	USB	(ScSw)
6930	S6930	22-12-2011	0747	message	USB	(ScSw)
6930	S6930	22-12-2011	0909	message	USB	(ScSw)
6930	S6930	22-12-2011	1217	message	USB	(ScSw)
6930	S6930	22-12-2011	1303	message	USB	(ScSw)
6930	S6930	22-12-2011	1440	message	USB	(ScSw)
6930	S6930	23-12-2011	0800	message	USB	(ScSw)
6930	S6930	23-12-2011	0851	message	USB	(ScSw)
6930	S6930	23-12-2011	0907	test count	USB	(ScSw)
6930	S6930	23-12-2011	1218	test count	USB	(ScSw)
6930	S6930	23-12-2011	1259	message	USB	(ScSw)
6930	S6930	23-12-2011	1419	test count	USB	(ScSw)
6930	S6930	23-12-2011	1423	message	USB	(ScSw)
6930	S6930	23-12-2011	1546	test count	USB	(ScSw)
6930	S6930	24-12-2011	1412	test count	USB	(ScSw)
6930	S6930	24-12-2011	1423	message	USB	(ScSw)
6930	S6930	25-12-2011	1051	test count	USB	(ScSw)
6930	S6930	25-12-2011	1114	message	USB	(ScSw)
6930	S6930	25-12-2011	1136	message	USB	(ScSw)
6930	S6930	25-12-2011	1406	test count	USB	(ScSw)
6982	E07	6-11-2011	1820	OM 199 199 199 1... 502 34 502 34 49305 04214 02355 05061 73650	AM	(AIK)

frequency	enigma	date	UTC	remarks	mode	day contributor
6982	E07	16-11-2011	1820	OM199 199 199 000...	AM	(AIK)
6982	E07	20-11-2011	1820	OM 199 199 199 1 199 199 199 1... 796 94 796 94 73038 53153	AM	(AIK)
6982	E07	27-11-2011	1820	OM 199 199 199 1 199 199 199 1... 415 36 415 3? 82421 98737 75723	AM	(AIK)
6982	E07	18-12-2011	1800	OM 989 989 989 000	AM	(AIK)
6982	E07	18-12-2011	1800	989 989 989 000	AM	(FN)
7015	M32	3-11-2011	0905	Russian navy "RLO de RIT" Radioprognoz	CW	(IARUMS)
7018	M32	4-12-2011	1212	Russian General staff, strategic msgs to REA4. Moves to 7319 kHz	F1B 50/1000	(TJ)
7038.7	MX	26-11-2011	2234	Beacon "D"	CW	(norave)
7038.7	MX	30-12-2011	2230	Beacon "D"	CW	(SW2)
7039	MX	26-11-2011	2235	Beacon "C"	CW	(norave)
7039	MX	30-12-2011	2230	Beacon "C"	CW	(SW2)
7041.8	MX	4-12-2011	0755	Beacon "L"	CW	(AB-HK)
7041.8	MX	27-12-2011	1211	Beacon "L"	CW	(DF5JL)
7317	E11	29-12-2011	0820	438/00	USB	(AB)
7317	E11a	8-12-2011	0820	438/36 Attention	USB	(Spectre)
7319	M32	4-12-2011	1748	Russian General staff moved here from 7018 kHz	F1B 50/1000	(TJ)
7364	XPA	6-12-2011	1920	Msg	MFSK	(AIK)
7364	XPA	8-12-2011	1920	138 138 138 1 6 00212 00227 71112 39256 ....	MFSK	(AIK)
7436	S06s	5-12-2011	1600	YL 176 176 176... MSG	USB	(AIK)
7436	S06s	12-12-2011	1600	YL 176 176 176... 234 234 5 5 89675 89675 45312 45312 78695 78695 34331 34331 09786 09786 234 234 5 5 00000	USB	(AIK)
7436	S06s	19-12-2011	1600	176 948 5 10480	USB	(FN)
7478	E07	5-12-2011	2000	OM 472 472 472 000	AM	(AIK)
7478	E07	12-12-2011	2000	OM 472 472 472 1 472 472 472 1... 577 20 577 20 20492 11032 .....	AM	(AIK)
7478	E07	18-12-2011	2000	472 472 472 000	AM	(FN)
7523	XPA	10-11-2011	1920	158 158 158 1... 00579 00215 48994 85535... 78251 05015 90275 42825 08640 LG 27201	MFSK	(AIK)
7523	XPA	15-11-2011	1920	158 158 158 1...2... 66666226606266 00314 00149 10577 97364	MFSK	(AIK)
7523	XPA	17-11-2011	1920	158 158 158 1...999999 6 00314 00149 10577 97364 78876 85042	MFSK	(AIK)
7523	XPA	22-11-2011	1920	158 158 158 000 158 158 158 000 158 158 158 000 01717 00001 00000 10140	MFSK	(AIK)
7523	XPA	29-11-2011	1920	158 158 158 000 158 158 158 000... 09119 00001 00000 10140	MFSK	(AIK)
7554	V02a	29-12-2011	2035	Discovered after the M8a ended on 13380kHz, believe the frequencies were reversed by mistake.	AM	(westt1us)
7566	M32	11-12-2011	0352	Russian Navy Sevastopol "RGX94 DE RCV" into Russian navigational message	CW	(PPA)
7566	M32	16-12-2011	0343	Russian Navy: RIP90 DE RCV QTC	CW	(PPA)
7580	V13	16-12-2011	0610	New Star in progress	USB	(AB-HK)
7580	V13	16-12-2011	1200	New Star. Flute tune + code messages	USB	(swl73oz)
7580	V13	16-12-2011	1300	New Star. Flute tune + code messages	USB	(AB-HK)
7580	V13	17-12-2011	1200	New Star. Flute tune + code messages	USB	(swl73oz)
7580	V13	17-12-2011	1300	New Star. Flute tune + code messages	USB	(swl73oz)
7580	V13	19-12-2011	0616	New Star in progress	USB	(AB-HK)
7580	V13	22-12-2011	0619	New Star in progress	USB	(AB-HK)
7580	V13	23-12-2011	0604	New Star in progress	USB	(AB-HK)
7580	V13	24-12-2011	0604	New Star in progress	USB	(AB-HK)
7580	V13	27-12-2011	1300	New Star YL/CC numbers stn	AM	(N2UHC)
7580	V13	28-12-2011	0504	New Star #4 in progress	USB	(AB-HK)

frequency	enigma	date	UTC	remarks	mode	day contributor
7580	V13	28-12-2011	0611	New Star #4 in progress	USB	(AB-HK)
7580	V13	28-12-2011	1203	New Star #4 in progress	USB	(AB-HK)
7580	V13	28-12-2011	1300	New Star #4. Flute tune + coded messages	USB	(AB-HK)
7580.0	V13	26-12-2011	1200	Voice of Korea on same fq.	USB	Mon (PanDR)
7582	M89	1-12-2011	0228	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL-HK)
7582	M89	5-12-2011	2353	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	6-12-2011	0046	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	6-12-2011	2341	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	7-12-2011	0541	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	9-12-2011	0101	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	9-12-2011	1425	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	10-12-2011	0011	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	10-12-2011	0529	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	11-12-2011	0025	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	11-12-2011	0251	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	13-12-2011	0317	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	14-12-2011	0426	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	15-12-2011	0039	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	21-12-2011	0627	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	22-12-2011	0509	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	23-12-2011	2326	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	24-12-2011	0035	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL-HK)
7582	M89	27-12-2011	0327	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	28-12-2011	0527	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	29-12-2011	0327	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110. At 0354z, QV5B on both 8110 and 7582 went silent. Checked 4225 //5500 but N/H. Back to round slip at 0406z on 8110 // 7582.	CW	(JPL-HK)
7582	M89	30-12-2011	0210	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	30-12-2011	0406	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7582	M89	31-12-2011	0521	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL-HK)
7584	M12	24-12-2011	0620	751 000	CW	(Danix)
7584	M12	30-12-2011	0620	751 1 740 95, 25 wpm	CW	(Danix)
7591.5	M31	20-12-2011	1104	French Air Force "CECI EST UNE MISSION DE CAL-ORIE DESTINE AU RGLAGE DE VOTRE RCEPTEUR LUNDI MARDI MERCREDI JEUDI VENDREDI SAMEDI DIMANCHE 301 302 303 304 305 306 307 308 309 JANVIER FVRIER MARS AVRIL MAI JUIN JUILLET AOUT SEPTEMBRE OCTOBRE NOVEMBRE D	CW	(Alf)
7602	M89	5-12-2011	2129	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL-HK)
7602	M89	6-12-2011	1620	v DKG6 DKG6 DKG6 de 3A7D 3A7D 3A7D	CW	(FN)
7602	M89	6-12-2011	1927	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL-HK)
7602	M89	6-12-2011	2219	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL-SVK)
7602	M89	6-12-2011	2227	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL-HK)
7602	M89	7-12-2011	1758	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL-HK)
7602	M89	9-12-2011	2104	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL-SVK)
7602	M89	10-12-2011	1944	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL-SVK)
7602	M89	11-12-2011	0032	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL-SVK)
7602	M89	13-12-2011	2024	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL-HK)
7607	M89	13-12-2011	2138	GNXG V-mkr to WITN	CW	(ALF)
7653	M32	7-12-2011	0306	Russian Mil?: HBPT wkg 7ZSW 5fg msg	CW	(AtB)
7688	V13	26-12-2011	0718	New Star in progress	USB	(AB-HK)
7688	V13	26-12-2011	0804	New Star in progress	USB	(AB-HK)
7688	V13	27-12-2011	0717	New Star in progress	USB	(AB-HK)
7688	V13	27-12-2011	0803	New Star in progress	USB	(AB-HK)

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7688	V13	28-12-2011	0709	New Star #3 in progress	USB		(AB-HK)
7688	V13	28-12-2011	0716	New Star #3 in progress	USB		(AB-HK)
7688	V13	29-12-2011	0800	New Star #3. Flute tune followed by codes mes- sages	USB		(AB-HK)
7688	V13	29-12-2011	0802	New Star in progress	USB		(AB-HK)
7688	V13	31-12-2011	0802	New Star in progress	USB		(AB-HK)
7691.0	M42	30-12-2011	0610	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Fri	(FMB)
7715.0	S06	30-12-2011	0630	934 00000	USB	Fri	
7724	E07	2-11-2011	2000	798/00 798 798 798 0 0 0...	AM		(AIK)
7724	E07	16-11-2011	2000	OM 798 798 798 000...	AM		(AIK)
7749	M32	28-12-2011	1040	Russian Navy: RKO81 msg to RHY47 "135 45 28 140 133 = 11111 66813 58665 74796 ...".	CW		(WP3)
7789	M32	23-12-2011	0747	8FS1: Russian military. Net control "SSEF DE 8FS1 QRJ? QYT"	CW		(PPA)
7792	VC01	31-12-2011	0805	Chinese Robot in progress	USB		(AB-HK)
7824	M32	28-11-2011	0713	CIS Mil: "L9F1 L9F1 L9F1 DE ZOK1 ZOK1 ZOP ZSR ZIX ZLG ZCK ZDE QYT6"	CW		(BCI)
7824	M32	27-12-2011	0650	Russian Mil: "J17X DE T2FI QTC T2FI 152 28 27 1046 152 = 996 = PPPPP PLT  ET DDRTP OBTTM LUKVJ HVKchP DOLT X VDLVO eFHM  E PPAOP DBEGW CFDVe ZVLDO TIS  uX FWPDQ LRAYV JAOV  E  äMTXB chchCON OBTTM RBDOL DPWAC ZLORP PLT  ET DDRTP WUPWT 996 RPT AL QLN"	CW		(WP3)
7826.0	M42	27-12-2011	2300	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) ger- many
7840	E11	27-12-2011	0645	517/00	USB		(AB)
7859	M32	14-12-2011	0514	Russian Mil. IHAL QTC 700 22 14 0902 700 = 990 = bgycr .....	CW		(PPA)
7861	M32	18-12-2011	0005	HW2: Russian Mil contacted station RAL2 with 5FG msg	CW		(AtB)
7861	M32	26-12-2011	1800	Russian Mil: RBL71, RAL2, RFH2	CW		(AtB)
7861	M32	31-12-2011	1810	Russian Mil: RAL2 contacted stations: RFH2, RDU2, RBL71. As usual RBL71 has difficulty hearing RAL2	CW		(AtB)
7931	M12	8-12-2011	1820	...13013 25698 LG 36622	CW		(AIK)
7931	M12	15-12-2011	1921	257 257 257 1 ... 259 35 259 35 99639 49848 56960 ... 17604 03790 000 000	CW		(MPJ)
7931	M12	22-12-2011	1920		CW		(Danix)
7931	M12	26-12-2011	1820	257 257 257 1 7705 48 7705 48 07634 56579 83337 ....	CW		(Danix)
7931	M12	26-12-2011	1920	257 1 6707 70, very weak, 27 wpm	CW		(Danix)
7931	M12	29-12-2011	1720	257 1 2801 67, weak, 27 wpm	CW		(Danix)
7964.0	M42	19-12-2011	1640	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Mon	(FMB) ger- many
7967	M32	27-11-2011	0945	CIS Mil: "S5LB S5LB S5LB DE WCX1 WCX1 QWE QYT6 K"	CW		(BCI)
7967	M32	27-11-2011	0945	CIS Mil: "WCX1 WCX1 DE S5LB S5LB S5LB K K"	CW		(BCI)
7967	M32	27-11-2011	0947	CIS Mil: "S5LB S5LB S5LB DE AWPX AWPX QYT9 K"	CW		(BCI)
7988	MC03	7-12-2011	0011	Chinese "Air Defense" cut-number msgs & time code "TDAA" (=0711)	CW		(ALF)
8040	M89	11-12-2011	0029	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW		(JPL-HK)
8047	M12	21-12-2011	1700	463... unreadable, 27 wpm	CW		(Danix)
8047	M12	28-12-2011	1700	463..., unreadable, 27 wpm	CW		(Danix)
8070.0	M51	19-12-2011	1628	(i.p.)	MCW	Mon	(FMB) ger- many
8083.0	M42	13-12-2011	1650	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) ger- many

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8083.0	M42	27-12-2011	1650	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Tue	(FMB) germany
8089.0	M42	30-12-2011	0720	Russian Gov/Intel.	FSK 200 Bd/1000 Hz	Fri	(FMB)
8091	E11	28-12-2011	1045	463/34	USB		(AB)
8091.0	E11a	28-12-2011	1151	i/p weak QRN4 QSB3 "...attention 60229 10479..."	USB	Wed	(SWL1409)
8096.0	M8a	31-12-2011	1400	5f cut nums: 25772 65461 21501 Weak sig.	CW	Sat	(westli)
8097	M08a	26-12-2011	1910	in progress	CW		(westt1us)
8110	M89	5-12-2011	2353	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	6-12-2011	0046	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	6-12-2011	2341	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	7-12-2011	0541	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	9-12-2011	0101	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	9-12-2011	1425	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	10-12-2011	0011	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	10-12-2011	0529	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	11-12-2011	0025	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	11-12-2011	0251	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	13-12-2011	0317	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	14-12-2011	0426	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	15-12-2011	0039	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	21-12-2011	0627	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	22-12-2011	0509	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	23-12-2011	2326	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	27-12-2011	0327	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	28-12-2011	0527	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	29-12-2011	0327	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	30-12-2011	0210	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	30-12-2011	0406	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8110	M89	31-12-2011	0521	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW		(JPL-HK)
8116	M12	22-12-2011	1740	124... unreadable, 27 wpm	CW		(Danix)
8116	M12	22-12-2011	1840	124... unreadable, 27 wpm	CW		(Danix)
8116	M12	29-12-2011	1740	124 1 7315 73, 27 wpm	CW		(Danix)
8116	M12	29-12-2011	1840	124..., unreadable	CW		(Danix)
8116	M12	30-12-2011	1640	124 1 8916 76, weak, 27 wpm	CW		(Danix)
8123	XPA	15-11-2011	1900	158 158 158 1... 6 00314 00149 10577 97364 78876 85042 05933	MFSK		(AIK)
8123	XPA	22-11-2011	1900	158 158 158 000 158 158 158 000 158 158 158 000 6 01717 00001 00000 10140	MFSK		(AIK)
8123	XPA	29-11-2011	1900	158 158 158 000 158 158 158 000... 09119 00001 00000 10140	MFSK		(AIK)
8164	XPA	6-12-2011	1900	Msg	MFSK		(AIK)
8164	XPA	8-12-2011	1900	138 138 138 1 6 00212 00227 71112 39256 ....	MFSK		(AIK)
8183	E07	6-11-2011	1800	OM 199 199 199 1... 502 34 502 34 49305 04214 02355 05061 73650	AM		(AIK)
8183	E07	16-11-2011	1800	OM 199 199 199 000...	AM		(AIK)
8183	E07	27-11-2011	1800	OM 199 199 199 1 199 199 199 1... ?15 ??? 415 ??? 8?4?1 98737...	AM		(AIK)
8191	M32	4-12-2011	1139	Russian General stafft msg to REA4	F1B 50/1000		(TJ)
8193	M12	26-12-2011	1320	214 000	CW		(AB)
8193	M12	26-12-2011	1320	214 000	CW		(Danix)
8260	S06s	3-12-2011	1210	254 903 6 71143 55384 65416 85422 93040 73775 903 6 00000	USB		(AB-SVK)
8345	M32	22-12-2011	1818	Russian warship RK081 "RIT DE RKO81 BT 930 20 22 2200 930 BT SML FOR RJD38 BT ..... 9935. 70026 ....."	CW		(Tom)



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8345	M32	23-12-2011	1800	Russian warship RK081 "DE RK081 BT 957 20 23 2200 957 BT SML FOR RJD38 BT ..... 99... 70022 ....."	CW		(Tom)
8345	M32	26-12-2011	0602	Russian war ship RK081 "RMP DE RK081 QSA IMI QTC K"; "RK081 461 20 26 1000 461 = SML FOR RJD38 = 26061 99357 70017 ...."	CW		(Tom)
8345	M32	30-12-2011	1905	Russian Navy: "RCV de RFH77 qsa ? k"	CW		(WP3)
8497.8	MX	4-12-2011	0755	Beacon "L"	CW		(AB-HK)
8815.0	S06	30-12-2011	0644	934 00000	USB	Fri	
8816	M32	7-12-2011	0825	Russian Naval Air Transport "RJF94 RCB de 30727 qtc: qth 5925 2231 qtr 0825 qah 5700 qal xlv 0930 qbd 0350 rpt al k 0940z: qqm xlv 0938	CW		(WP3)
8816	M32	8-12-2011	0835	Russian Naval Air Transport "RJF94 de 09405 qtc qqm xlaa 0832"	CW		(ALF)
8816	M32	8-12-2011	0840	Russian Navy: "RMP de RK081 qsa 3 k"	CW		(ALF)
8816	M32	9-12-2011	0951	Russian Naval Air Transport "RJF94 RCB de 30727 qtc qqm xlv (Levashovo) 0950 rpt al k 1221z: qtc qay ett(?) 1218 qah 5400 qbd 4200 k"	CW		(WP3)
8816	M32	10-12-2011	1125	Russian Naval Air Transport tfc to RJF94 "qth 6117 3700 qtr 1120 qbg 7900 rpt al k"	CW		(WP3)
8816	M32	12-12-2011	0950	30727: Russian Naval Air Transport msg to RCB RJF94 "qto 0932 qrd xlv xmbw qre 1215 qah 5700 qbd 4100 rpt al k 1020z: qay evrr (Riga) 1018 qah 5700 qbd 3700 rpt al k 1106z: qay eett (Tallinn) 1104 qal xlv (Levashovo) 1158 qah 5700 qbd 3000 rpt al	CW		(WP3)
8816	M32	28-12-2011	0945	Russian Naval Air Transport 09409 mag to RJF94 "qto 0931 qrd xnnt xiad qre 1411 qbd 15800 k"	CW		(WP3)
8947.8	MX	4-12-2011	1646	Beacon L: Skt Peterburg	CW		(MPJ)
9001.25	M42	30-11-2011	0640	Russian Gov/Intel	RUS-ARQ 100/2000		(BCI)
9063.0	M8a	31-12-2011	0800	5f cut nums: ..... VG sig. Up late IP.	MCW	Sat	(westli)
9091	M21	9-12-2011	0645	Grid tracking	CW		(AtB)
9091	M21	13-12-2011	0450	Grid tracking	CW		(AtB)
9140	M42	5-12-2011	0747	RUU70: Russian Gov. "vvv rrf30 rrf30 rrf30 de ruu70 ruu70 zhc ? zhc ?"	RUS-ARQ		(TJ)
9145	M32	30-12-2011	1115	Russian Navy: RIW tfc to RK081 on 12464 kHz	CW		(WP3)
9153.0	M8a	31-12-2011	0700	5f cut nums: 17881 02732 36422 VG sig.	MCW	Sat	(westli)
9176	M12	12-12-2011	1800	very weak 000 000	CW		(AIK)
9176	M12	22-12-2011	1900		CW		(Danix)
9176	M12	26-12-2011	1800	257 257 257 1 7705 48 7705 48 07634 56579 83337 ....	CW		(Danix)
9176	M12	26-12-2011	1900	257 1 6707 70, very weak, 27 wpm	CW		(Danix)
9176	M12	29-12-2011	1700	257 1 2801 67, weak, 27 wpm	CW		(Danix)
9184	M12	30-12-2011	0640	751 1 740 95, 25 wpm	CW		(Danix)
9223	M12	26-12-2011	1300	214 000	CW		(AB)
9223	M12	26-12-2011	1300	214 000	CW		(Danix)
9252	M12	22-12-2011	1720	124... unreadable, 27 wpm	CW		(Danix)
9252	M12	22-12-2011	1820	124... unreadable, 27 wpm	CW		(Danix)
9264	M12	29-12-2011	1720	124 1 7315 73, 27 wpm	CW		(Danix)
9264	M12	29-12-2011	1820	124..., unreadable	CW		(Danix)
9264	M12	30-12-2011	1620	124 1 8916 76, weak, 27 wpm	CW		(Danix)
9373	M32	30-12-2011	1135	Russian Navy: RMP qso RK081 on 12464 kHz	CW		(WP3)
9446	E11	26-12-2011	0830	649/00	USB		(AB)
9446	E11	26-12-2011	0900	534/00	USB		(AB)
9446	E11	29-12-2011	0830	649/00	USB		(AB)
9446	E11a	7-12-2011	0900	537/36 Attention	USB		(Spectre)

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9450	E25	4-11-2011	1159	277 1 277 1 277...MESSAGE MESSAGE MESSAGE	USB		(AIK)
9450	E25	4-11-2011	1258	277 1 277 1 277...MESSAGE MESSAGE MESSAGE	USB		(AIK)
9450	E25	4-11-2011	1316	WINDOWS XP "shutdown.wav"	USB		(AIK)
9450	E25	12-12-2011	1245	555 2121 2021 0110 6422 7056 5601 3046 6436 7646 1768 2820 0110 carrier 1230z, WinXP startup sound at 1235z, tone, ALM, YL, EOM only	AM		(MG)
9450	E25	15-12-2011	1305	WinXP sounds, OM prayer, WinXP Spider Solitaire sounds, carrier	AM		(MG)
9450	E25	15-12-2011	1317	tone, YL, numbers 0-9, ALM, 1323z tone, numbers 0-6, WinXP sounds, carrier	AM		(MG)
9450	E25	18-12-2011	1301	275 1051 280x14 carrier up 1248z, tone, YL, EOM	AM		(MG)
9450	E25	31-12-2011	1315	780 9793 1060 6110 5645 2817 6110 788 4 6 tone, YL, 7 rptd, EOM	AM		(MG)
9450	E25	31-12-2011	1320	as of 1315z YL	AM		(MG)
9450	E25a	13-12-2011	1229	557 2 carrier i.p. 1200z, tone, ALM, YL, Mx2	AM		(MG)
9450	E25a	13-12-2011	1317	785 1 carrier 1310z, tone, YL, Mx3, carrier	AM		(MG)
9450	E25a	13-12-2011	1346	227 1 tone, ALM, YL, Mx3, Rx3, EOM, carrier	AM		(MG)
9450	E25a	15-12-2011	1327	785 2 tone, YL, Mx3, Rx3, carrier, WinXP Spider Solitaire sounds	AM		(MG)
9450	E25a	31-12-2011	1215	830 1 carrier, tone, IO, YL	AM		(MG)
9450	E26a	20-12-2011	1315	785 5 788 4 YL, 1317z 7 rptd, Mx3, R, 4, tone, starts again, EOM EOT	AM		(MG)
9610	S11a	2-12-2011	1020	426/00	USB		(AB)
9610	S11a	29-12-2011	1020	426/00	USB		(AB)
9988	M32	23-12-2011	1138	Russian Navy Sevastopol RCV wkg RFH77 on 12464 kHz	CW		(WP3)
10134	VC03	4-12-2011	1519	OM reciting groups of numbers. Operator also switched to unknown secure mode (sounded quite similar to ANDVT)	USB		(BCA)
10180	M89	7-12-2011	0409	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW		(JPL-SVK)
10180	M89	9-12-2011	1207	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW		(JPL-SVK)
10180	M89	10-12-2011	0008	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW		(JPL-SVK)
10180	M89	13-12-2011	0325	V DKG6 (x3) DE 3A7D (x2) (Cont'd) /5801	CW		(JPL-HK)
10180	M89	15-12-2011	0254	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW		(JPL-HK)
10180	M89	22-12-2011	1340	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW		(JPL-HK)
10180	M89	23-12-2011	0434	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW		(JPL-SVK)
10255	V30	17-12-2011	1555	Male voice. Message	USB		(Fib)
10265	S06s	13-12-2011	0800	352 ... barely audible; lots of QRM	USB		(AB)
10270.0	M42	30-12-2011	1015	Russian Gov/Intel.	Baudot 200Bd/500 Hz	Fri	(FMB)
10343	M12	22-12-2011	1700	124... unreadable, 27 wpm	CW		(Danix)
10343	M12	22-12-2011	1800	124... unreadable, 27 wpm	CW		(Danix)
10343	M12	29-12-2011	1700	124 1 7315 73, 27 wpm	CW		(Danix)
10343	M12	29-12-2011	1800	124..., unreadable	CW		(Danix)
10343	M12	30-12-2011	1600	124 1 8916 76, weak, 27 wpm	CW		(Danix)
10375	M97	1-12-2011	1455	SD 65 KKK SD 65 KKK SD 65 KKK (complete msg in N&O #171)	CW		(JPL-HK)
10375	M97	2-12-2011	1455	Repeat of SD 65 and SD 66. Same format as yes- terday.	CW		(JPL-HK)
10375	M97	5-12-2011	1501	Repeat of SD 65 and SD 66.	CW		(JPL-HK)
10375	M97	7-12-2011	1502	In Progress - SD 66 sent then lost connection	CW		(JPL-HK)
10375	M97	10-12-2011	1455	In Progress - SD 66 sent	CW		(JPL-HK)
10375	M97	12-12-2011	1455	Repeat of SD 65 and SD 66	CW		(JPL-HK)
10375	M97	15-12-2011	1528	In progress SD 66 sent	CW		(JPL-AUS)
10375	M97	17-12-2011	1506	SD 65 and SD 66	CW		(Danix)
10375	M97	17-12-2011	1519	SD 65 and SD 66	CW		(Danix)

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10375	M97	23-12-2011	1455	SD 65 and 66 sent	CW		(JPL-HK)
10432.0	M8a	31-12-2011	0900	5f cut nums: 14161 87691 35762 Very weak sig.	MCW	Sat	(westli)
10460	M89	21-12-2011	0624	(In progress) VVV (x3) Q2M DE NYZ (x2) QSA ? K (Wed) //6840	CW		(JPL-HK)
10543	M32	18-12-2011	1358	Russian navy: RCV. Nawip to uid	CW		(WP3)
10543	M32	30-12-2011	0946	Russian Navy: RAL65 wkg RIT	CW		(WP3)
10543	M32	30-12-2011	1340	Russian Navy: "RKZ de RCV qtc prognoz pogody ..."	CW		(WP3)
10640	M89	10-12-2011	0520	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Sat) //6840	CW		(JPL-HK)
10640	M89	14-12-2011	0420	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Wed) //6840	CW		(JPL-HK)
10640	M89	22-12-2011	0520	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Thu) //6840	CW		(JPL-HK)
10640	M89	22-12-2011	1420	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Thu) //6840	CW		(JPL-HK)
10640	M89	28-12-2011	0520	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Wed) //6840	CW		(JPL-HK)
10640	M89	29-12-2011	0320	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Thu) //6840	CW		(JPL-HK)
10640	M89	30-12-2011	0220	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Fri) //6840	CW		(JPL-HK)
10640	M89	30-12-2011	0420	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Fri) //6840	CW		(JPL-HK)
10640	M89	31-12-2011	0520	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Sat) //6840	CW		(JPL-HK)
10690	E11	24-12-2011	1400	YL/EE 985/10 attention 72846 x2 76596 x2 .. ends 78061 out	USB		(linkz)
10690	E11a	13-12-2011	1405	981/10 Attention! 04594 43980 67196 88966 23923 25698 82280 92178 88784 64692 Out!	USB		(ATCManch)
10690	E11a	24-12-2011	1400	YL 985/10 728 46 728 46 76596 76596 59186 59186 65642 65642 98396 98396 52498 52498 81466 81466 44139 44139 03120 03120 78061 78061 ATTENTION 728 46 76596 59186 65642 98396 52498 81466 44139 01320 ...	USB		(AIK)
10779	M89	1-12-2011	0227	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-SVK)
10779	M89	1-12-2011	2304	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-SVK)
10779	M89	5-12-2011	2352	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10779	M89	6-12-2011	0025	V WITN (x3) DE GNXG (x2) (Cont'd) Msg at 0036z - See N&O 171	CW		(JPL-HK)
10779	M89	6-12-2011	2344	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10779	M89	7-12-2011	0000	V WITN (x3) DE GNXG (x2) (Cont'd) Msg at 0001z - See N&O 171	CW		(JPL-HK)
10779	M89	7-12-2011	0546	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10779	M89	9-12-2011	0059	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10779	M89	10-12-2011	0004	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10779	M89	10-12-2011	0526	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10779	M89	11-12-2011	0019	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10779	M89	11-12-2011	0254	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10779	M89	12-12-2011	2314	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10779	M89	13-12-2011	0316	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10779	M89	14-12-2011	0419	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10779	M89	15-12-2011	0038	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10779	M89	22-12-2011	0510	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10779	M89	23-12-2011	2327	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10779	M89	24-12-2011	2325	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10779	M89	27-12-2011	0324	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)

frequency	enigma	date	UTC	remarks	mode	day	contributor
10779	M89	28-12-2011	0525	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10779	M89	30-12-2011	0206	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10779	M89	30-12-2011	0407	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10779	M89	31-12-2011	0527	V WITN (x3) DE GNXG (x2) (Cont'd)	CW		(JPL-HK)
10871.7	MX	22-12-2011	1427	Beacon "D"	CW		(WP3)
10871.8	MX	4-12-2011	0755	Beacon "P" heavily distorted	CW		(AB-HK)
10871.8	MX	22-12-2011	1427	Beacon "P"	CW		(WP3)
10871.8	MX	25-12-2011	1343	Beacon "P"	CW		(ML4)
10871.9	MX	30-11-2011	0901	Beacon "P"	CW		(TJ)
10871.9	MX	25-12-2011	1343	Beacon "S"	CW		(ML4)
10872	MX	22-12-2011	1427	Beacon "C"	CW		(WP3)
10920	S06s	1-12-2011	1210	425 879 6 75643 89764 09091 24365 78564 66042 879 6 00000	USB		(AB)
11025	M42	15-12-2011	0706	Russian Gov/Intel.	F1B 100/500		(TJ)
11155	M32	30-12-2011	1222	Russian Navy: RIT qso ral65	CW		(WP3)
11170	E17z	29-12-2011	0800	674 674 674 00000	USB		(AB)
11170.0	E17z	22-12-2011	0800	Caught IP / at EOT (zeroes)	AM	Thu	(BCA)
11354	M32	28-12-2011	1000	Russian Naval Air Transport 47049 report to PRIBOY and NOVATOR	CW		(JDR)
11498	M42	8-12-2011	0755	Russian Gov/Intel.	RUS-ARQ 100/2000		(TJ)
11504	M21	26-12-2011	1559	Russian Air Defence =991959??8????? =992000??8?????	CW		(WP3)
11780	S06	23-12-2011	0938	Slavic yl numbers	AM		(ML4)
11780	S06s	2-12-2011	0930	516 270 8 74072 45156 75178 56798 76152 64255 80532 13223 270 8 00000	USB		(AB)
12137	V07	12-11-2011	0140	YL SS 5f Callup 661 ID 567 79 grps	USB		(Token)
12137	V07	25-12-2011	0140	YL SS 5f Callup 661 ID 676 65 grps	USB		(Token)
12155	S06s	1-12-2011	1200	425 879 6 75643 89764 09091 24365 78564 66042 879 6 00000	USB		(AB)
12180	V02a	13-12-2011	1918	Varied between good reception and just plain terrible	AM		(ATCManch)
12209.0	M42	30-12-2011	1025	Russian Gov/Intel.	Baudot 200Bd/500 Hz	Fri	(FMB)
12214	M08a	13-12-2011	1332	in progress	CW		(ATCManch)
12365	S06s	28-12-2011	1000	729 531 6 65653 89756 31208 97956 34331 86761 531 6 00000	AM		(AB)
12464	M32	21-12-2011	1234	Russian warship RAL46 "BT 715 19 21 1614 715 BT FM RAL46 21121 99367 70096 41498 80207 10160 40310 53010 70211 884// 22233 20801 302// 41002 21014 BT AR"	CW		(Tom)
12464	M32	22-12-2011	1214	Russian warship RH081 "RMP DE RK081 QSA IMI QTC K RK081 303 20 22 1600 303 BT SML FOR RJD38 BT 22121 99357 70041 41798 12705 10180 40266 5.000 70200 81001 22233 0170. ..501 327// 4///// 88000 80000 22017 AR RK081"	CW		(Tom)
12464	M32	22-12-2011	1254	Russian warship RAL46 "RIT DE RAL46 QSA IMI QTC K RAL46 145 17 22 1630 145 BT FM RAL46 RAL65 FOR RJD74 RJH45 22121 99357 70040 41/98 03004 10180 40.62 51020 70200 22233 330// 40801 22012 BT AR RAL46"	CW		(Tom)
12464	M32	23-12-2011	1120	Russian Navy: "RCV de RFH77 qyt4 qsx 4222/5372 k" (nothing there) 1135z "qyt4 qsx 9988/13044 k"	CW		(WP3)
12464	M32	23-12-2011	1246	Russian warship RAL46 "RMP RIT RIW DE RAL46 BT 641 18 23 1635 641 BT FM RAL46 RAL65 FOR RJH74 RJH45 BT 23121 99358 70015 41598 62306 10160 40260 53010 70111 8662/ 22200 32/// 40501 21013 AR BT RAL46 K"	CW		(Tom)

frequency	enigma	date	UTC	remarks	mode	day	contributor
12464	M32	26-12-2011	0829	Russian war ship RFH77 "RCV DE RFH77 QSX 10873 / 9192 K" at 0834 UTC: "RCV DE RFH77 QSX 11429 / 12561 K"	CW		(Tom)
12464	M32	27-12-2011	0705	Russian Navy: "RCV de RFH77 qyt4 qsx 9192/10984"	CW		(WP3)
12464	M32	29-12-2011	1238	Russian Navy. RHY73 msg to RCV: "RCV de RHY73 qyt4 qwh 8322/12561 k"	CW		(WP3)
12464	M32	29-12-2011	1243	Russian Navy. RAL46 msg to RMP: "RAL46 455 16 29 1620 455 = for rjh74 rjh45 = 29121 99372 10002 41598 30604 10160 40283 53008 70100 8311/ 22213 307// 41603 29013 = ar ral46 k"	CW		(WP3)
12464	M32	29-12-2011	1251	Russian Navy. RHY73 msg to RAL36: "RAL46 de RHY73 qsa3 qrv k"	CW		(WP3)
12464	M32	29-12-2011	1319	Russian Navy. RMZW msg to RCV: "RCV de RMZW qsa2 k 1409z: qyt9 wrk k"	CW		(WP3)
12464	M32	30-12-2011	0750	Russian Navy: RAL65 tfc to RCV: "ral65 710 17 30 1010 710 = for rhj45 rje73 rhj74 = 30061 99367 70091 41/98 93507 10140 40400 54005 70222 89/// 22273 00140 20402 30013 = ar ral65 k"; Later "ral65 847 40 30 1050 847 = for rit = 11111 18149 93266 ..."	CW		(WP3)
12464	M32	30-12-2011	1115	Russian war ship RKO81 msg to RIW "RKO81 850 25 30 1225 850 ..... RKO81 cor col pbl 850 25 30 1225 850 k"	CW		(WP3)
12464	M32	30-12-2011	1136	Russian war ship RKO81 wkg RMP	CW		(WP3)
12464	M32	30-12-2011	1222	Russian Navy: RAL65 tfc RIT. " ral65 126 16 30 1611 126 = for rjh45 rjh74 = 30121 99375 70097 41998 01011 10160 40435 52035 70200 80000 32278 _ 0120 20604 30013 = ral65 k"	CW		(WP3)
12464	M32	31-12-2011	1239	Russian Navy: RAL65 tfc to RIW "ral65 641 16 31 1602 641 = for rjh45 rjh74 = 31121 99406 70111 41498 72707 10109 40430 52015 70322 873// 22212 00110 20302 31013 = ar ral65 k"	CW		(WP3)
12530	S11a	1-12-2011	1015	475/00	USB		(AB)
12530	S11a	29-12-2011	1015	475/00	USB		(AB)
12952	S06s	29-12-2011	0900	167 167 167 00000	AM		(AB)
13044	M32	23-12-2011	1138	Russian Navy RCV wkg RFH77 on 12464 kHz	CW		(WP3)
13200	V13	1-12-2011	1200	New Star. Flute tune + coded messages	USB		(AB-HK)
13200	V13	2-12-2011	0626	New Star in progress	USB		(AB-HK)
13200	V13	3-12-2011	0600	New Star. Flute tune and coded messages	USB		(AB-HK)
13200	V13	4-12-2011	0625	New Star in progress	USB		(AB-HK)
13200	V13	5-12-2011	0607	New Star in progress	USB		(AB-HK)
13380	M08a	29-12-2011	2000	in progress. At end of transmission V2a was in progress but had been drowned out by the M8a.	CW		(westt1us)
13527.7	MX	4-12-2011	0755	Beacon "D"	CW		(AB-HK)
13527.8	MX	4-12-2011	0755	Beacon "P"	CW		(AB-HK)
13528	MX	4-12-2011	0755	Beacon "C"	CW		(AB-HK)
13528.1	MX	4-12-2011	0628	Beacon "A"	CW		(AB-HK)
13528.2	MX	4-12-2011	0628	Beacon "F"	CW		(AB-HK)
13528.4	MX	4-12-2011	0628	Beacon "M"	CW		(AB-HK)
13565	S06s	29-12-2011	0910	167 167 167 00000	AM		(AB)
13960	X06	24-12-2011	1106	Mazielka. Sequence: 216354	AM		(EW)
13994.75	M42	15-12-2011	0809	Russian Gov/Intel in tfc	F1B 1000/1000		(TJ)
13996	M32	15-12-2011	0828	ZP6P: Russian Mil Moscow area, strategic operational link, out stations prob in the Far-East (see N&O 171)	CW		(TJ)
13996	M32	16-12-2011	1251	Russian Mil. 9A1R (collective) QLY2 NO K. F9FV de ZP6P K. IM8L de ZP6P K. No apparent response.	CW		(MPJ)

frequency	enigma	date	UTC	remarks	mode	day	contributor
				Far East net.			
13996	M32	16-12-2011	1358	NCS Russian Mil Far East Net. Bcasts msg to collective 9A1R: 9A1R de ZP6P QTC AR. 9AIR 819 34 16 1741 819 = ZDR 821 = ChLDZQ DRPPI ... QSMGA ODLRP AEKWK 948 QLN K. Nil further.	CW		(MPJ)
14280	S06s	28-12-2011	1010	729 531 6 65653 89756 31208 97956 34331 86761 531 6 00000	AM		(AB)
14374	V07	11-6-2011	0140	YL SS 5f Callup 883 ID 522 67 grps	USB		(Token)
14374	V07	27-11-2011	0140	YL SS 5f Callup 883 ID 957 93 grps	USB		(Token)
14432.0	M42	30-12-2011	1035	Russian Gov/Intel.	Baudot 200Bd/500 Hz	Fri	(FMB)
14448.2	M42	30-11-2011	0903	Russian Gov/Intel. "51040551184964800=84141"	Baudot 200/500		(BCI)
14637	V07	12-11-2011	0120	YL SS 5f Callup 661 ID 567 79 grps	USB		(Token)
14637	V07	18-12-2011	0120	YL SS 5f Callup 661 null msg	USB		(Token)
14637	V07	25-12-2011	0120	YL SS 5f Callup 661 ID 676 65 grps	USB		(Token)
14644	X06	2-12-2011	1325	Mazielka	AM		(EW)
14863	X06	9-12-2011	0901	Mazielka. Sequence: 615243	AM		(EW)
14863	X06	9-12-2011	0901	Mazielka. Sequence: 615243	AM		(EW)
14970	X06	30-11-2011	0718	Mazielka. Sequence: 216354	USB		(BCI)
14970	X06	24-12-2011	1423	Mazielka. Sequence: 216354. Long transmission	AM		(linkz)
15874	M12	20-11-2011	0120	Callup 883 null msg	CW		(Token)
15874	V07	11-6-2011	0120	YL SS 5f Callup 883 ID 522 67 grps	USB		(Token)
15874	V07	13-11-2011	0100	YL SS 5f Callup 883 null msg	USB		(Token)
15874	V07	27-11-2011	0120	YL SS 5f Callup 883 ID 957 93 grps	USB		(Token)
16037	V07	12-11-2011	0100	YL SS 5f Callup 661 ID 567 79 grps	USB		(Token)
16037	V07	18-12-2011	0100	YL SS 5f Callup 661 null msg	USB		(Token)
16037	V07	25-12-2011	0100	YL SS 5f Callup 661 ID 676 65 grps	USB		(Token)
16045	M51	30-11-2011	0724	"NR 83 N 30 08:26:54 1983 BT GCIBM OJBNG"	CW		(BCI)
16115	X06	24-12-2011	1041	Mazielka. Sequence: 215346	AM		(EW)
16117	X06	12-12-2011	1045	Mazielka. Sequence: 463125	AM		(BCI)
16128	M32	30-11-2011	0916	KPKA: Russian Mil: msg to HDTE (see N&O 171)	CW		(TJ)
16219	M42	2-12-2011	0923	Russian Gov.	CROWD-36		(EW)
16219	X06	2-12-2011	0924	Mazielka	USB		(EW)
16219	X06	2-12-2011	0926	Mazielka	USB		(EW)
16317	X06	6-12-2011	0730	Mazielka. Sequence: 612534	AM		(Dan)
16317	X06	27-12-2011	1004	Mazielka. Sequence: 612534	AM		(Dan)
16331.7	MX	4-12-2011	0755	Beacon "D"	CW		(AB-HK)
16331.9	MX	4-12-2011	0755	Beacon "S"	CW		(AB-HK)
16332	MX	4-12-2011	0755	Beacon "C"	CW		(AB-HK)
16332.2	MX	4-12-2011	0628	Beacon "F"	CW		(AB-HK)
16332.3	MX	4-12-2011	0628	Beacon "K"	CW		(AB-HK)
17433.5	M42	30-11-2011	0738	Russian Gov.	CROWD-36		(BCI)
17435	S06	23-12-2011	0852	In progress	AM		(EW)
18074	M12	20-11-2011	0100	Callup 883 null msg	CW		(Token)
18074	V07	11-6-2011	0100	YL SS 5f Callup 883 ID 522 67 grps	USB		(Token)
18074	V07	13-11-2011	0100	YL SS 5f Callup 883 null msg	USB		(Token)
18074	V07	27-11-2011	0100	YL SS 5f Callup 883 ID 957 93 grps	USB		(Token)
19201	M32	31-12-2011	1436	Russian Navy: RCV tfc for RBE86	CW		(FB)
21438	M32	11-11-2011	1800	Russian navy: "RIP90 de RCV"	CW		(IARUMS)

## CONTRIBUTORS

AB	Ary Boender, Netherlands	Jon-FL	Jon, FL, USA
AB-EST	Ary Boender via UVB76 relay Estonia	JPL-AUS	JPL via DX Tuner, Logan, Australia
AB-HK	Ary Boender via GlobalTuners Hong Kong	JPL-HK	JPL via GlobalTuners Hong Kong
AB-SVK	Ary Boender via GlobalTuners Slovakia	JPL-SVK	JPL via GlobalTuners Slovakia
AIK	Douglas, UK	JRa	Joachim, Germany
AK2	Alexandr, Kiev, Ukraine	linkz	Linkz, S.E. France
ALF	Alf, Germany	M56007	matt56007, LA, USA
AnEur	Anonymous Europe	MG	Manolis, Greece
AtB	Attu Bosch, AK, USA	ML4	Michel Lacroix, France
ATCManch	ATC, UK	MPO	MPO
Avare	Avare from irc.mibbit.net/#uvb-76	N2UHC	N2UHC
BCA	Brandon, CA, USA	Norave	Norave (GFD)
BCI	Bruno Casula, Italy	PanDR	PanDR48, Sweden
Dan	Daniel	PPA	Peter Poelstra, Netherlands
Danix	Danix111, Gdynia, Poland	RILA	Resonant.interval, LA, USA
DF5JL	Tom DF5JL, Germany	Saber	SaberWing, N. Ireland
EW	Eddy Waters, Australia	scsw	ScanSweden, Sweden
FB	F4LKC Franck, France	Spec	The Spectre 3000, UK
FMB	FMB, Germany	swl73oz	J. Murphy, Australia
FN	Fritz Nusser, Switzerland	TJ	Trond Jacobsen, Norway
GVN	Geir, Norway	Token	T!, CA, USA
HS2	Hans Snekvik, W. Europe	Trojan	Trojan, Russia
IARUMS	IARU Monitoring Service	Tucana	Tucana
IP-NL	Ivellios Paranormali via GlobalTuners Netherlands	VL	Vincent Lecler, France
JDR	Joost de Raaf, Netherlands	Westli	Westli, CA, USA
JM5	Jan Michalski, Poland	Westt1us	Westt1us, USA
		WP3	Wolfgang Palmberger

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Website: <http://www.udxf.nl>

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161	Utility stations	Unid "prova"

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162	Utility stations	Driftnet beacons
162	Utility stations	Polish Pip
162	Utility stations	Unid 11111.1 (now MC03)
162	Utility stations	Unid 3763 (now MC03)
162	Utility stations	Unid 7696
162	Utility stations	Unid 7GGA
162	Utility stations	Unid air defense (now MC03)
162	Utility stations	Unid beacon "S"
162	Utility stations	Unid BX699
162	Utility stations	Unid Indonesian net
162	Utility stations	Unid KTR4
162	Various modes	M42 message + logs
162	Various modes	X06
162	Various modes	XSL
162	Voice stations	E10 exit
162	Voice stations	S28 messages
162	Voice stations	S30
162	Voice stations	V13
162	Voice stations	V24
162	Voice stations	V26
162	Voice stations	VC01
162	Voice stations	VTN (now V30) report by Token
163	General	Spy books
163	Intelligence	Intelligence profile: EUJSC
163	Logs	Logs

N&O	Subject	Item
163	Morse stations	M18 logs
163	Morse stations	M21
163	Morse stations	M32
163	Morse stations	M89 messages
163	Morse stations	MX
163	Utility stations	CIS taxi's
163	Utility stations	Libya: Operation Unified Protector
163	Utility stations	Unid Air Defense (now MC03)
163	Utility stations	Unid beepers
163	Utility stations	Unid Indonesian net
163	Various modes	M42
163	Various modes	X06
163	Various modes	XSL
163	Voice stations	E10 flashback
163	Voice stations	S28 equipment and messages
163	Voice stations	S30
163	Voice stations	S32
163	Voice stations	V13 freq change
163	Voice stations	V26
163	Voice stations	VC01
164	Intelligence	Intelligence profile: Morocco
164	Logs	Logs
164	Morse stations	M12 messages
164	Morse stations	M18
164	Morse stations	M21
164	Morse stations	M32
164	Morse stations	M89 messages
164	Morse stations	M95
164	Morse stations	MX
164	Utility stations	Polish military
164	Utility stations	Unid Asian net
164	Utility stations	Unid Indonesian net
164	Utility stations	Unid VVV 3K
164	Various modes	M42
164	Various modes	X06
164	Voice stations	E06 messages
164	Voice stations	E07 messages
164	Voice stations	E11 messages
164	Voice stations	G06 messages
164	Voice stations	G11 messages
164	Voice stations	S06 messages
164	Voice stations	S11a messages
164	Voice stations	S28 phone conversation + messages
164	Voice stations	S30 messages
164	Voice stations	S32 messages
164	Voice stations	V24 report by Token
164	Voice stations	V26
164	Voice stations	VC01
164	Voice stations	VC04 new station (now VC03)

N&O	Subject	Item
164	Voice stations	VTN (now V30)
165	General	Libya: Operation Unified Protector
165	Logs	Logs
165	Morse stations	M01 message
165	Morse stations	M12 messages
165	Morse stations	M14
165	Morse stations	M21
165	Morse stations	M32
165	Morse stations	M89
165	Morse stations	M94
165	Morse stations	M95
165	Morse stations	MX
165	Utility stations	Unid Asian net
165	Utility stations	Unid Indonesian net
165	Utility stations	Unid VVV 3K
165	Various modes	M42
165	Various modes	SK01
165	Various modes	X06
165	Various modes	XPA / XPA2
165	Voice stations	E06 messages
165	Voice stations	E07 message
165	Voice stations	S06 messages
165	Voice stations	S21 message
165	Voice stations	S28 DFs
165	Voice stations	V24
165	Voice stations	V26
165	Voice stations	VC01
165	Voice stations	VTN (now V30)
166	General	Historic films
166	Intelligence	Intelligence profile: Iran
166	Logs	Logs
166	Morse stations	M01 messages
166	Morse stations	M12 messages
166	Morse stations	M21
166	Morse stations	M23
166	Morse stations	M32
166	Morse stations	M51
166	Morse stations	M89
166	Morse stations	M94 schedules
166	Morse stations	MX
166	Utility stations	Libya: Operation Unified Protector
166	Utility stations	Unid Asian net
166	Utility stations	Unid Indonesian net
166	Various modes	M42
166	Various modes	X06
166	Voice stations	E06 messages
166	Voice stations	E07 messages
166	Voice stations	E11 messages
166	Voice stations	G06 messages

N&O	Subject	Item
166	Voice stations	S21 message
166	Voice stations	S28 messages
166	Voice stations	S30 message
166	Voice stations	S32 message
166	Voice stations	V24 schedules
166	Voice stations	V30
166	Voice stations	VC01
167	General	Libya: Operation Unified Protector
167	Intelligence	Intelligence profile: Bahrain
167	Logs	Logs
167	Morse stations	M01 messages
167	Morse stations	M03 messages
167	Morse stations	M12 message
167	Morse stations	M21
167	Morse stations	M22
167	Morse stations	M32
167	Morse stations	M89
167	Morse stations	MV30 (now M97) new station
167	Morse stations	MX
167	Utility stations	African logs
167	Utility stations	Polish military
167	Utility stations	Unid VVV 3K
167	Various modes	M42
167	Various modes	OLO32
167	Various modes	X06
167	Various modes	XP messages
167	Voice stations	E06 messages
167	Voice stations	E07 messages
167	Voice stations	E11 messages
167	Voice stations	G11 messages
167	Voice stations	S06 messages
167	Voice stations	S11 messages
167	Voice stations	S21
167	Voice stations	S28
167	Voice stations	V07
167	Voice stations	VC01
168	General	Libya: Operation Unified Protector
168	General	Wired Magazine article about S28
168	Intelligence	Intelligence profile: Iceland
168	Logs	Logs
168	Morse stations	M01 messages
168	Morse stations	M03
168	Morse stations	M12
168	Morse stations	M14
168	Morse stations	M21
168	Morse stations	M22
168	Morse stations	M23 messages
168	Morse stations	M32
168	Morse stations	M51 messages

N&O	Subject	Item
168	Morse stations	M89 messages
168	Morse stations	MX
168	Utility stations	Driftnet beacons
168	Utility stations	Pirate HWK7
168	Utility stations	Unid Chinese time stamp station (now MC03)
168	Utility stations	Unid Indonesian net
168	Utility stations	Unid morse 10651 kHz
168	Utility stations	Unide Chinese station
168	Various modes	M42
168	Various modes	X06
168	Various modes	XSL
168	Voice stations	E06 messages
168	Voice stations	E07 messages
168	Voice stations	E11a messages
168	Voice stations	E17z
168	Voice stations	G06 messages
168	Voice stations	G11 messages
168	Voice stations	S06 messages
168	Voice stations	S11a messages
168	Voice stations	S21 message
168	Voice stations	S28 messages + callsigns
168	Voice stations	S30 messages
168	Voice stations	S6930 report + logs
168	Voice stations	VC01
168	Voice stations	VC04 + MVC03
169	General	New designator MVC03
169	General	New designator S5426
169	General	New designator VC05
169	General	Rivet decoder
169	General	Russian spy case
169	General	SF storyteller
169	General	VC04 same as VC03
169	Intelligence	Intelligence profile: Japan
169	Logs	Logs
169	Morse stations	M01 messages
169	Morse stations	M03 messages
169	Morse stations	M12
169	Morse stations	M18
169	Morse stations	M21
169	Morse stations	M22 messages
169	Morse stations	M32
169	Morse stations	M41
169	Morse stations	M51 messages
169	Morse stations	M89 messages
169	Morse stations	MVC03
169	Morse stations	MX
169	Utility stations	Chinese Firedrake frequencies
169	Utility stations	CIS taxi's
169	Utility stations	Unid 13320 kHz numbers station

N&O	Subject	Item
169	Utility stations	Unid 16000 kHz
169	Utility stations	Unid 7100 kHz Asian net
169	Utility stations	Unid MD10 de M789C
169	Utility stations	Unid Tagalog station
169	Utility stations	Unid VVV 3K
169	Utility stations	XSG Shanghai Radio
169	Various modes	M42
169	Various modes	X06
169	Various modes	XPA
169	Voice stations	E06 messages
169	Voice stations	E07 messages
169	Voice stations	E11 messages
169	Voice stations	G11 messages
169	Voice stations	Logbooks from the Povarovo site
169	Voice stations	S06 messages
169	Voice stations	S11 messages
169	Voice stations	S28 messages
169	Voice stations	S30 messages
169	Voice stations	S5426 messages
169	Voice stations	S6930 messages
169	Voice stations	V13 frequency change
169	Voice stations	VC01
169	Voice stations	VC03
169	Voice stations	VC05 profile
170	General	New designator M97 (ex MV30)
170	Intelligence	Intelligence profile: Philippines
170	Logs	Logs
170	Morse stations	M03 messages
170	Morse stations	M12
170	Morse stations	M14 message
170	Morse stations	M18
170	Morse stations	M21
170	Morse stations	M22
170	Morse stations	M32
170	Morse stations	M41
170	Morse stations	M51 messages
170	Morse stations	M89 messages
170	Morse stations	M97 report
170	Morse stations	MX
170	Utility stations	Unid Air Defense (now MC03)
170	Utility stations	Unid stations 205, 225, 355
170	Utility stations	Unid X9981????
170	Utility stations	Unids U34D and OBCD
170	Various modes	M42
170	Various modes	OLO32 profile
170	Various modes	X06
170	Various modes	XPA messages
170	Various modes	XSL frequencies
170	Voice stations	E06 messages

N&O	Subject	Item
170	Voice stations	E07 messages
170	Voice stations	E11 messages
170	Voice stations	E25 logs
170	Voice stations	G06 messages
170	Voice stations	G11 messages
170	Voice stations	S06 messages
170	Voice stations	S11a
170	Voice stations	S21 message
170	Voice stations	S28 additional info about the logbooks
170	Voice stations	S28 messages
170	Voice stations	S28 on Russian TV
170	Voice stations	S30 messages
170	Voice stations	S6930 messages
170	Voice stations	V15 unconfirmed transmission
170	Voice stations	V24
170	Voice stations	V30
170	Voice stations	VC01
170	Voice stations	VC05
171	General	N&O 2011 index
171	General	New designator: MC03
171	General	North Korea: death of Kim Jong III
171	Intelligence	Intelligence profile: Bulgaria
171	Logs	Logs section
171	Morse stations	M03
171	Morse stations	M12 messages
171	Morse stations	M18
171	Morse stations	M21
171	Morse stations	M22
171	Morse stations	M31
171	Morse stations	M32
171	Morse stations	M89 messages
171	Morse stations	M94
171	Morse stations	M97 report
171	Morse stations	MC03
171	Morse stations	MX
171	Utility stations	Driftnet beacons, pirate beacons, unid beacon
171	Utility stations	Unid "DEJF" on 3753 kHz
171	Utility stations	Unid "F7T" on 4600 kHz
171	Utility stations	Unid numbers station on 11000 and 16000 kHz
171	Various modes	M42
171	Various modes	X06
171	Various modes	XPA message
171	Voice stations	E06 messages
171	Voice stations	E07 messages
171	Voice stations	E11 messages
171	Voice stations	E17z
171	Voice stations	E25 logs
171	Voice stations	G06 messages
171	Voice stations	G11 messages



<b>N&amp;O</b>	<b>Subject</b>	<b>Item</b>
<b>171</b>	<b>Voice stations</b>	<b>S06 messages</b>
<b>171</b>	<b>Voice stations</b>	<b>S11a messages</b>
<b>171</b>	<b>Voice stations</b>	<b>S28 messages</b>
<b>171</b>	<b>Voice stations</b>	<b>S30 report, schedules, messages, location</b>
<b>171</b>	<b>Voice stations</b>	<b>S32 messages, location</b>
<b>171</b>	<b>Voice stations</b>	<b>S6930 messages</b>
<b>171</b>	<b>Voice stations</b>	<b>V07 report by Token</b>
<b>171</b>	<b>Voice stations</b>	<b>V13 new schedules</b>
<b>171</b>	<b>Voice stations</b>	<b>V21</b>
<b>171</b>	<b>Voice stations</b>	<b>V24</b>
<b>171</b>	<b>Voice stations</b>	<b>V30</b>
<b>171</b>	<b>Voice stations</b>	<b>VC01</b>
<b>171</b>	<b>Voice stations</b>	<b>VC03</b>